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ORIGINAL COMMUNICATIONS.

ON ACCLIMATION. *An Inaugural Essay presented for the Degree of Doctor of Medicine in the University of Pennsylvania.* By PHILIP C. WILLIAMS, M. D., of Winchester, Virginia.

Acclimation—the result of the various modifications in the human system, when it is subjected to the influence of a climate different from that to which it has been accustomed—is a theme of deep interest.

It is one, the proper appreciation of which would prevent or greatly mitigate many of the diseases to which man is now subjected, in his migrations for the sake of travel, commerce, and the pursuit of science. The question assumes still greater importance when viewed in its relation to colonization, or the settlement of large bodies of men in regions where the climate is often so different from that of their own native land. Within the limits of the United States alone, the changes thus effected by the continual movement of the people, from the old to the new States and territories, invest the problem with a peculiar and home interest.

It seems to be an established law of nature, that the constitution of man must be modified by the atmospheric influences with which he is surrounded, and that it must carry the impress of the climate which he inhabits.

While we admit the difficulty of accounting for all the distinctive traits that characterize the chief races of mankind, we cannot deny that many of the modifications in their external appearance, and physiological actions, are attributable to the influence of climate. Did the narrow limits of an inaugural essay permit, I might, to substantiate this view, repeat the affirmative opinions of Hippocrates, Montesquieu, and Cabanis. The "Father of Medicine" was the first to point out the controlling influence of climate, as he did so clearly in his essay on "Waters, Airs, and Places," when he compared the people of Europe with those of Asia, and attributed the superiority of the former over the latter, to a purer and cooler atmosphere. Montesquieu appeals to history to show that, in the various struggles among rival candidates for imperial sway at Rome, he who secured the assistance of the European legions was sure of success. General history, in its narratives of the overthrow of empires, kingdoms, and nations, points to the same conclusion.

There are many circumstances which combine to produce these modifications of climate, and these changes in the human system; such as the thermometric and hygrometric states of the atmosphere; the elevation above the level of the sea; the prevalence of, and the exposure to, particular winds, &c.

Let us, for a moment, examine the first of these, viz., the effects of temperature. The range of temperature compatible with human existence is exceedingly extensive; for we find man inhabiting not only the hot burning plains of the tropics, but the frozen dreary and desolate regions of the poles. The experiments of Tillet, Fordyce, Delaroche, Blagden, Berger, &c., show that for a short time, man is capable of enduring a temperature far surpassing that ever reached at the hottest part of the earth's surface. In these experiments air heated even to 325° Fahr. was breathed, for some minutes, without any great inconvenience. The immediate effects were, a considerable increase in the rapidity of the pulse, and excessive perspiration, accompanied by considerable fatigue.

On the other hand, man can live for months (as they, for example, who have passed a winter in the polar regions,) in an air so cold as to freeze mercury.

It has been clearly shown that the effects of heat are manifested both upon the organic and the animal functions. On the former,

they are seen in the increased activity of the circulatory and respiratory functions ; on the latter, they are followed by sensations of languor and fatigue.

The *functional* effects of heat are most distinctly marked upon the skin and the liver. The skin becomes changed in its appearance; and assumes either a dark or a yellow tinge, which may be attributed to an increase of the biliary secretion. The liver is stimulated to greater activity; the secretion of bile is greatly augmented, and its sensible properties are considerably changed. This high degree of functional excitement is frequently attended with inflammation of the organ.

The close relation observed between the skin and the liver, both in its physiological and pathological conditions, have induced some authors to speak of a "cutaneo-hepatic sympathy." (*Johnson on Tropical Climates.*) But while the skin and liver are thus *excited* by high and long continued atmospheric heat, the *lungs and kidneys act with diminished energy.*

Cold, in its primary effects, is in direct contrast with heat. The first is as decidedly sedative as the last is stimulating. Cold, continued for a length of time, diminishes the activity of all the functions, and reduces the being exposed to its influence, to a state resembling the sleep of hibernating animals. If continued still longer, it produces a state much resembling intoxication, followed by an excessive and overwhelming drowsiness, which is frequently the prelude to a sleep that terminates in death.

Equally contrasted are the *secondary effects* of heat and cold, if neither be carried so far as to derange the functions. Thus, while the excitement of heat is followed by languor and debility, the temporary depression from cold is succeeded by reaction, and a feeling of increased vigor. Cold, then, when moderate in degree, favors the activity both of the organic and animal functions—especially respiration, circulation, and nutrition—and it is followed by an increased development of animal heat.

This is not the place, nor have I time to dwell upon calorification. It is sufficient to make the statement, which is satisfactorily sustained by facts, that it can be referred to the action of no single organ, but is the result of a chemico-vital action, going on in every part of the system, by the combination of oxygen, taken in through the lungs, with the different tissues of the economy. It

may be looked upon as the combustion of all the solid and fluid elements of the body. Hence every thing, such as good nutrition, regular respiration and circulation, that tends to increase the fuel, increases to a correspondent degree the development of animal heat. In speaking of cold as contributing to the development of animal heat, it is important to remember that it operates in an indirect manner, viz., 1st. By condensing the atmosphere, and thus furnishing for respiration a larger proportion of oxygen in a given time. 2d. By exciting to exercise, in order to resist the depressing influence of cold—thus increasing the circulation and respiration. 3d. By increasing the appetite for nutritive food—especially fatty matters—thus affording a larger amount of “heat generating material.”

The *direct* operation of cold is to diminish the animal heat; and if continued in a great degree for a length of time, it may arrest its development by inducing a *torpor of the nervous system*, and thus enfeeble both the respiration and the circulation. The *direct* operation of heat, on the other hand, is not only to excite the functions generally, but also to *increase* the animal heat.

In estimating the influence of temperature upon the human frame, we should study its *comparative effects*, for we find the same climate producing totally different impressions upon its inhabitants, according to their race and prior climatic habits.

This is most strikingly exhibited in the following example from Andral, (*Dict. de Méd. et de Chir. pratique, art. Acclimatement.*) He states that the middle and higher portions of the island of Ceylon are inhabited by Europeans and negroes: the former, being exposed to a climate much hotter than that to which they were accustomed, die, in great numbers, of dysentery or hepatitis; while the latter, subjected to more cold than in their native climate, are rapidly carried off by pneumonia or phthisis.

Another element going to make up the complex problem of climate, is the *hygrometric* state of the atmosphere. This causes modifications in the human system, evinced by a striking difference in the external appearance, muscular development, activity, &c., of the inhabitants of a dry and hot, compared with those of a moist and sultry climate. For instance, the inhabitants of the sandy plains and deserts of Arabia and Africa, are thin and spare, but active: while those of the lower and moister countries as

about the Nile, Niger, &c., exhibit large and gross frames, with a development of adipose and cellular tissue. These differences did not escape the attention of Hippocrates. In the valuable treatise already referred to, he describes the inhabitants of the Phasis, whose country is fenny, warm, humid, and wooded, and where copious and excessive rains occur at all seasons. "They drink the hot and stagnant waters both when rendered putrid by the sun and when swollen by the rains. The Phasis is the most stagnant of all rivers, and runs the smoothest; all the fruits which spring there are unwholesome, of feeble and imperfect growth, owing to the redundancy of water, and on this account they do not ripen, for much vapor from the waters overspreads the country. For these reasons the Phasians have shapes different from those of all other men; for they are large in stature, and of a very gross habit of body, so that not a joint or vein is visible; in color they are sallow, as if affected with jaundice." They are naturally languid in supporting bodily fatigue. (Vol. 1, p. 209, Adams' edition for the Sydenham Society.)

Climate is also greatly modified by the *elevation* of a country above the level of the sea. The differences thus produced are very striking. In Mexico, for example, we have every variety of climate. Commencing with the low lands about Vera Cruz, which give origin to tropical fruits and tropical diseases, we gradually rise from district to district, with its diminished temperature, till we reach the city of Mexico, around which we find the temperature and productions of northern Europe. So with the regions of the Andes: travelling from the countries at their base, immediately under the Equator, we have variations from the scorching heat of a tropical sun, to the perpetual snows of Polar regions.

In all these elevated situations the atmospheric pressure is of course lessened. Hence we find that they give rise to an acceleration of the circulation, a tendency to pulmonary congestions, dyspnœa, and even to hemorrhages, in persons accustomed to inhabit situations nearer the level of the sea. In addition to the rarefaction of the air, these places are subjected to great and sudden changes of temperature, to excessively cold and violent winds, to the accumulation of dense fogs, &c.; and thus they exert upon the human frame many of the deleterious effects of Polar regions.

For a full, beautiful and satisfactory exposition of these effects, see "Traité d' Hygiène Publique et Privée, par Michel Lévy." Tome 1, p. 367-380.

We next approach to a consideration of those climatic changes effected by the exposure of a country to particular winds. This also claimed the observation and attention of Hippocrates.

In the case of the Phasis, already alluded to, he particularly ascribes many of the peculiarities of its climate to the long continued effects of warm, southern winds. So, also, in a subsequent part of the same treatise, (p. 220,) when describing the different people of Europe, he says, "Such as inhabit a country which is mountainous, rugged and elevated, are naturally of an enterprising, warlike disposition, and have no little of the savage and ferocious in their nature." On the other hand he remarks, "Such as dwell in places which are low-lying, abounding in meadows, and ill ventilated, and who have a larger proportion of hot, than of cold winds, and who make use of warm waters—these are not likely to be of large stature, nor well proportioned, but of a broad make, fleshy," &c. "Courage and laborious enterprise are not naturally in them." With the region last described, is contrasted that inhabited by the Scythians, which Hippocrates (p. 213) tells us, "lies under the northern bears; and consists of plains, high-lying and naked, and not crowned by mountains." "The winds blowing from the hot regions of the earth do not reach them, or but seldom, and with little force; but the winds from the *north* always blow, congealed as they are, by the snow, the ice and much water."

The same description equally applies to the Tartars, &c., of Northern Asia, who inhabit a country which descends from the Himalayah mountains to the North Sea. How striking the contrast between the inhabitants of this region and those upon the southern declivity, running down to the Indian ocean, and of course exposed to the warm winds of the south.

Differences of nearly equal importance are observed between countries continually exposed to eastern, and those exposed to western winds.

The nature of the soil, the qualities of the water drunk by the inhabitants, and the extent of wooded lands, are also features not to be overlooked in our estimate of climate.

It must be quite clear, even from this necessarily brief and imperfect sketch, that mere temperature, or the degree of heat or of cold, can convey but a very inadequate idea of the character of the seasons and climate of a country. Nor, in estimating even the temperature of any region, can we trust alone to its latitude, or its distance from the equator; for the enquiries of Humboldt and others, clearly show, that the "Isothermal lines" do not correspond with those of latitude, nor are they parallel to each other. Nor are the "Isothermal lines," or those of equal summer, parallel to the "Isocheimal lines," or those of equal winter; nor either of these with the "Isothermal lines." A forcible illustration of this fact is presented in the close resemblance of the winter climate of parts of Devon and Cornwall, in England, to that of central Italy, although they are separated by several degrees of latitude, and differ so much in their summers.

[As a still more striking exemplification of this truth, I would ask attention to the following extract from a speech delivered by Mr. Benton, in the United States Senate. Speaking of the climate of New Mexico, he says, "Humboldt thus describes it: 'New Mexico, though placed under the same latitude with Syria and Central Persia, has a climate eminently cold. It freezes there in the middle of the month of May, near to Santa Fee, and a little further north (under the parallel of the Morea,) the Rio del Norte is covered, sometimes several years in succession, with ice so thick that horses and carriages pass on it.' *Essay on New Spain*, vol. i. p. 103.

'The environs of El Paso are a delicious country, which resemble the most beautiful parts of Andalusia. The fields are cultivated in corn and wheat. The vineyards produce excellent wines. The gardens contain in abundance all the fruit trees of Europe.' (Vol. iii. p. 306.)

"Humboldt," continues Benton, "is right, and recent travellers now confirm what he wrote in 1804. It was at the head of the valley of the Del Norte, some three degrees north of Santa Fee, that Col. Fremont suffered his great disaster—had to struggle through snows above the heads of men and horses, and found it a relief to tread the river, solid with ice, for a road. At Santa Fee, the 20th of February, it was winter; eight days afterwards, on the

Rio Abajo, half way to El Paso, and having descended 2600 feet, and still 1200 feet above the level of El Paso, it was spring, the farmers plowing and seeding, the early fruit trees in bloom, and the air so mild that he camped out at nights without tents, though in a settled and hospitable country.”]

Having noticed some of the peculiarities of different climates, and having shown that they modify more or less the constitutions of all who come within the sphere of their continued action, the question naturally arises: can man, with his constitution thus moulded by his native climate, remove to a foreign country without risk of injury to his health, or of suffering from disease? We answer, without hesitation, in the negative.

The history of European colonization and conquest, especially in the East and West Indies, and in Northern and Central Africa, exhibits a frightful loss of life, owing to the changes of climate and the difficulty of acclimation. Even in our own country, we have seen with what a great sacrifice of life have been accomplished, first the settlement of our Atlantic, and afterwards that of our Southern and Western States.

Yearly, the natives of the Northern States, who in the pursuit of commerce, or of pleasure, make a sojourn in the Carolinas or in Louisiana, pay the penalty of disease, and too frequently of life itself.

A knowledge of these and similar facts, must make us slow to credit, at least to the extent generally entertained, the opinion that man possesses the power of adapting himself to *all changes* of climate. A recent writer, M. Boudin, in an article entitled “*Etudes de Pathologie Comparative*,”* formally protests against such an opinion, “a belief of which, he thinks, not resting upon any experimental basis, could only have originated from what has been observed of a fraction of humanity represented by what we call the Caucasian race.” “From the earliest times to our own day, we see the European fail in all his attempts at acquiring a permanent hold upon the land of Egypt; where, also, the Negro and the Mameluke are shown to be incapable of procreating beyond the third generation. In Corsica, the Italian termination of family names proves, of itself, the inability of the French to establish their stock upon that island. Where, in the north of Africa, do we find the descendants of the Romans and the Vandals? Why, in America,

* *Ann. d' Hyg. and de Med. Leg.*, 1849.

continues Boudin, after passing the 36th degree of latitude, do we meet with slavery everywhere, unless where the elevation of the land mitigates the deleterious influence of an excessively increased temperature? The height above the ocean which gives protection to the life of a European, in hot climates, becomes fatal to the negro. Out of 53 black soldiers posted at Ninera Elia, in the island of Ceylon, at 6200 feet above the level of the sea, 15 died before the end of the year. In the earliest times, despotism made use of exile into countries alien to their nature, for the destruction of different nations. With this view, after the destruction of Jerusalem, were a great number of Jews sent to Sardinia, on the occasion of whose exile Tacitus makes the following reflection: ‘*Et si ob gravitatem cœli interissent, vile damnum.*’ After the war of the Morea, Mehemet Ali, wishing to get clear of the undisciplined Arnouts, sent them to the shores of the Red Sea, *where in a few years, 1800 men were reduced to 400, by the mere influence of the climate.*” A forgetfulness or an ignorance of the incompatibility of certain races with particular regions of the earth, has caused an immense loss of life and the failure of the most costly expeditions. “Thus, in 1817, a negro regiment, placed in garrison at Gibraltar, was almost entirely destroyed by pulmonary consumption. In 1841, the expedition to the Niger failed, perhaps owing to the bad selection of the crews of the vessels. In *three weeks* after having entered the Niger, *130 out of 145 white men were attacked with fever, and 40 sank under it.* Out of 158 *negro sailors*, on the other hand, born in America, in the West Indies, or on the coast of Africa, *11 only* were assailed by fever—but 9 of the cases were fatal. Thiers, in his history of “the Consulate and the Empire,” shows the dreadful loss of life among the French troops employed in the invasion of St. Domingo. “But 7000 or 8000 men remained out of an army of 32000; 15000 *were carried off in two months.* At the same time, in which Toussaint l’Ouverture, the sinister prophet who had foretold and longed for these disasters, died of cold in France, a prisoner at the fort of Joux, our soldiers sank under the piercing rays of a destroying sun.” It would be easy to multiply examples to the same effect; all going to show the heavy tax paid by those who adventure into remote lands, and into climates differing from that of their nativity. Not only are immense numbers carried off by dis-

ease, but the survivors are reduced below their former standard of bodily strength and mental vigor, and thus are made an easy prey to disease; and in some places it has been doubted whether the engrafted stock could last many generations. Twining asserts (Johnson *op. cit.*) that, in the delta of the Ganges, such is the influence of its climate, the unmixed European race becomes extinct at the third generation.

Notwithstanding, however, all these instances, we are forced to admit that the human constitution undoubtedly possesses the power of accommodating itself to new, and oftentimes to the most opposite, climatic influences; and this not merely in the case of a few individuals, but of entire communities, and even of great nations. A notable example is afforded in the case of the Jews who are scattered over the habitable globe—all of them retaining features which mark their common origin. But still, if we compare a Dutch with a Spanish Jew, and these again with a Jew of Malabar, we observe a striking difference in their appearance; and also find them exhibiting the shades of complexion, the color of the skin, and the general external development, indicative of the climatic influences to which they are respectively subjected, and which approximate them to the natives of these different countries. We see clearly, that though the race is unmistakeably continued, it has undergone changes, only to be attributed to the influence of a new and foreign climate.

It now remains for us to enquire into the changes by which the process of acclimation is accomplished. First we shall speak of those effected by a removal from a cold to a hot climate, or in other words, SOUTHERN ACCLIMATION.

We have seen that, *in a cold climate*, man's circulation and respiration must be active; that his nutrition must be good, in order to supply the materials for the development of heat sufficient to protect him from the injurious influence of the cold atmosphere by which he is surrounded. In this condition, he is carried to a tropical climate, where the active evolution of heat is not only unnecessary, but injurious; he arrives with all his organs actively discharging their respective functions; developing a quantity of heat far exceeding the demand. Were it not for the abundant perspiration that accompanies this functional excitement, the new-comer would be exposed to the most imminent danger.

It is owing to this fact that, as experience shows, the acclimation of delicate, weak, or old persons, is more easily accomplished than in the case of those possessing strong, energetic constitutions, and with a tendency to plethora.

The stranger, in a *hot climate*, is subject to the following changes: His circulation becomes accelerated; he suffers extremely from excessive heat; is subject to the most distressing restlessness, in his being for a time utterly unable to procure sleep; and he exhibits a strong tendency to local congestions, particularly to the intestinal canal, brain, liver and skin. All strangers, however, are not thus affected; nor can we give any fixed, invariable description that will be applicable to all. We see some affected with a trivial indisposition, which soon disappears, and they are well. Some, after continuing for a few days slightly indisposed, are attacked by an affection of brain, liver or intestinal canal, by which they are frequently carried off: others, without any previous warning, are suddenly seized with a fatal inflammation of these organs. The greater number, however, at first, seem to be but slightly affected by the change of climate; but, by degrees, their bodies are emaciated, their strength declines, languor and debility are depicted upon their countenances, and they, unconsciously, becomes victims of chronic diseases of the liver and intestinal canal.

From what has been before stated, we are prepared to learn that countries in the same latitude, do not exert the same influence upon strangers. We find that these countries, owing to peculiar situation, temperature, and many other circumstances, give origin to different diseases, and thus operate in a different degree upon new comers.

It would carry me too far from the immediate subject of this essay, and occupy too much time, to enter fully into this subject; hence I must content myself by making the general statement, that countries of the same latitude, however different may be their endemic diseases, and however different their primary effects, produce ultimately about the same mortality. Though many examples might be quoted, the following from Andral (*op. cit.*) affords a good illustration of this point. "Out of *one thousand British* troops sent to *Jamaica*, it was found that *four to five hundred of them perished during the first eight months*; while out of an

equal number sent to Madras during *the same period, only sixty to seventy died.* But this disproportion diminished as their sojourn continued, so that at the end of two years the *number of deaths, in the two stations, was nearly equal.*" In the former case, they were carried off by yellow fever, or some similar disease, which rarely occurs more than once to the same individual; and as the climate is mild, they that escape this attack, afterwards enjoy good health; whereas, in the latter place, near Madras, they are exempt from yellow fever and other such epidemics, so that few die at first, but after remaining awhile, exposed to the climate, with its atmospheric extremes, their constitutions become enfeebled and broken down, and they are carried off in great numbers by dysentery, or some disease of the stomach or liver.

(To be continued.)

Nitrate of Silver in Epidemic Dysentery. By LEW. SLUSSER,
M. D., of Canal Fulton, Ohio.

That diseases of an epidemic character are more difficult to manage—more intractable in their nature and treatment, than the same in a spasmodic form, is a principle in the practice of medicine that will not, I presume, be denied.

During the summer of 1849, dysentery prevailed in this section with unwonted virulence. In some neighborhoods the mortality attending its prevalence was so alarming, that with some practitioners it was regarded as but another form of Asiatic cholera.

In very many cases, the ordinary remedies, such as we had been accustomed to prescribe in former years, and with satisfactory results, utterly failed. Neither mercurials, opiates, nor astringents, separately, or in varied combination, exercised any control over the symptoms, not even palliating them. The same may be said of ipecac., Hope's mixture and counter-irritation. Nor had injections of starch and laudanum, ice water, or suppositories of solid opium any effect in mitigating the tormina and tenesmus. Dr. Young's buttermilk treatment, (vide Amer. Jour. of Med. Sci., 1842,) proved advantageous in a few cases; in others, it undoubtedly aggravated the symptoms. Antiphlogistics were contra-indicated. Some cases, despite the most energetic treatment, would terminate fatally in less than forty-eight hours; others, prostrated from the

excessive evacuations, fell into a typhoid condition, lingered a fortnight or more, and then died. In this latter condition it was, after having failed with those remedies hitherto regarded as orthodox, that I had recourse to nitrate of silver, a remedy first suggested I believe, in this disease, by M. Troussseau. In determining upon this article, I was mainly influenced by the knowledge of its frequent exhibition in other enteric affections, both acute and chronic; and particularly by the ocular proof of its beneficial effects in typhoid fever, which prevailed among us the previous spring. Regarding the pathological conditions of the two affections, as in many respects analogous, I felt justified in giving the remedy a trial. The results were very satisfactory; and I may add, that subsequent experience confirms the favorable opinion previously entertained.

I have not had any experience of its effects in the *first* stage of dysentery. In what some authors, very properly, as I conceive, designate the *second* stage—where the discharges give evidence of an ulcerated condition of the bowels, accompanied with typhoid symptoms—I regard nitrate of silver as *the* remedy to be preferred to any I have yet seen recommended. I will give particulars of a few cases from notes taken at the time.

The first case in which I exhibited it, was that of Mrs. T—, æt. about 35; the mother of four children. I had treated her in the spring for “sore mouth peculiar to nursing women.” In June she had an attack of cholera morbus, which yielded upon the exhibition of our ordinary remedies. About the first of August, dysentery made its appearance in her family. First her husband was attacked; he convalesced in a few days upon the calomel and opium treatment. Next herself.

Resorting to the previously tried remedies already mentioned, without any mitigation of symptoms, her condition soon became such, that I was satisfied unless some other course of treatment was speedily adopted, the result could not be otherwise than fatal. At this stage decided typhoid symptoms had supervened; countenance, hippocratic; skin, bedewed with a cold clammy sweat; eyes, sunken and lustreless; pulse, weak and frequent; tongue, dry, red and glazed; thirst, ardent; bowels, tympanitic; tormina and tenesmus almost incessant; fifteen and twenty discharges in as many hours, of a purulent, bloody, and lymphous character.

I determined upon the following prescription :

R. Argent. Nitrat. Crys.	gr. vj.
Pulv. Opii.	3j.
Mucil. Gum Acac.	q. s.
M. ft. pil. No. xij.	One every two hours.

Her prostrated condition was such as to demand the free exhibition of stimulants, in order to sustain the faltering energies of life. Brandy and arom. spts. ammon. were given *pro re nata*. At the same time I ordered an injection every three hours, of gr. ij. nitrate of silver dissolved in 3j. warm water, mixed with a gill of tepid milk. At the expiration of twenty-four hours from the adoption of this treatment, I found an evident amelioration of the distressing symptoms. The evacuations were less frequent, and there was a decided mitigation of the tormina and tenesmus. I was encouraged to repeat the prescription, but prolonged the time of giving the pills to three hours, and omitted the injections. The discharges soon after exhibited the characteristic dark appearance, the effects of the remedy, and contained less mucus. The symptoms gradually abated, the secretions became natural, and in a few days the patient was entirely out of danger.

The next case was that of a daughter of Mrs. T. æt. 10 years. She had been confined about a week ; condition much the same as that of her mother. Ordered the same prescription, observing a differential proportion. The improvement, for the first twenty-four hours was not so marked as that of her mother ; and observing a want of action about the surface, I concluded upon the following:

R. Nitrate Argent. Crys.	gr. iiiss.
Salph. Morph.	gr. i.
Vin. Ipecac.	3i.
Aquaæ Camph.	3i.

M. A teaspoonful every two hours. At the same time ordered a warm bath. This had the desired effect. Free perspiration followed ; the alimentary secretions improved ; and in a short time she also recovered.

Few days after, saw Mr. M—, æt. about 45, in consultation with Dr. Donahu. He had been laboring under dysentery some twelve days, and was much prostrated. Pulse 130; abdomen tympanic, though not tender upon pressure; had discharged on the day previous a large quantity of fatty matter, having the consistence

of healthy pus, but inodorous; tongue dry, and covered with a thick white coat; the papillæ prominent; sordes upon the teeth and gums; his whole surface covered with a fœtid clammy perspiration. He had had the full benefit of the calomel and opium treatment. Typhoid symptoms were present, and it was evident there was a decided downward tendency.

The treatment adopted in case first was decided upon, and the results were equally fortunate.

I deem it unnecessary to extend this article, by a detailed history of other cases, with like symptoms, treated by the same curative agent, and resulting alike satisfactorily. Sufficient, I think, has already been adduced to recommend the agent as one at least worthy of trial. I might mention that I suggested the remedy to several neighboring practitioners, and so far as I have heard, its administration, in the conditions before specified, was attended with uniform success.

In obstinate diarrhœa of infants, it has proven in my hands an excellent remedy. In advanced stages, where the prostration and emaciation is extreme, dejections frequent and watery, I have exhibited the following mixture with admirable results.

R. Argent. Nitrat. Crys.

Sulph. Morph. aa. gr. ij.

Gum Arab. 3i.

Sacch. Alb. 3ij.

Aquæ. f. 3ij.

Ft. mix. Teaspoonful every three hours to a child three years old.

Case of Arrested Muscular Developement. By P. K. HUNTINGTON, M. D., of Perry, Wyoming County, New York. (Communicated by Prof. J. K. Mitchell.)

Mr. Benedict, a young man, aged 22 years, of good habits, has had, without any apparent cause, for the last eight years, no developement whatever of the muscles of the thighs and pelvis, and also of the arms, while those of the leg, fore-arm, foot and hand, and also of the back, are fully developed. The gastrocnemii are very large indeed, resembling much those of an opera dancer, while the muscles of the thigh, including the glutei, are

flaccid and shrunken, resembling those we find in the limbs of a person in the last stages of phthisis. The contrast between the arm and fore-arm is not quite so striking as that of the corresponding parts of the lower extremities, yet it is very apparent to any observer.

He complains of no pain or inconvenience whatever, and suffers only from the weakness which necessarily attends such debility of the muscles.

Whenever he rises from a sitting posture to a standing one, it is done by the assistance of the upper extremities, and a sort of springing motion. He cannot step up a common stair without a very great effort, accompanied also with a sudden spring. To raise himself from the stooping posture is impossible without extrinsic mechanical aid.

There is no apparent difference in the sides of his body; both seem affected alike.

He imagines that the muscles affected are less in size than they were eight years ago, but whether this is really the case, or whether it has been merely an arrest in the developement, while the rest of the body has been developed naturally, is as yet a question unanswered.

I have searched the works to which I have access to find an analogous case, but in vain, for I can find nothing which even approximates it.

I would advise him to visit your city, were I satisfied that any medical aid would benefit him.

With this concise description, therefore, I wish to submit the case to you, asking your opinion in regard to the propriety and probable success of medication.

Case of Lactation in a Male. By C. W. HORNOR, M. D., of Philadelphia. (Communicated by Professor Dunglison.)

DEAR SIR,—According to your request, I send the particulars of the case of lactation in an adult male. It occurred in the person of an athletic American, named Charles Collins, aged 22 years, a blacksmith, working at his trade in New York. About the 10th of February last, his attention was first drawn to his left breast, which appeared to be enlarging, and continued to increase in size

for three weeks, when he came to Philadelphia. After being in this city for three weeks, he became quite anxious in regard to his condition, for although he suffered very little pain, the mamma had become quite as large as that of a female nursing. He therefore, through the persuasion of an aunt, was, on the twenty-third of March, induced to apply at the Clinic of the Jefferson Medical College to consult the faculty of that Institution. His case came up before Prof. Mütter, who, upon examination, found the mammary gland largely developed, and filled with the lacteal secretion, which differed in no wise from that of a mother. He could assign no cause for this freak of nature; his health was very good, and the other breast natural. A soap plaster was prescribed, and compression ordered to be kept up, which he persisted in for full six weeks, when the gland returned to its usual size; and when I saw him this morning at Fairmount, where he now resides, it was in every respect like the other.

BIBLIOGRAPHICAL NOTICES.

SOUTHERN MEDICAL REPORTS: *Consisting of General and Special Reports of the Medical Topography, Meteorology and Prevalent Diseases in the following States: Louisiana, Alabama, Mississippi, North Carolina, South Carolina, Georgia, Florida, Arkansas, Tennessee and Texas; to be published annually.* Edited by E. D. FENNER, M. D., of New Orleans, Member of the American Medical Association, &c. &c.

(Concluded from page 422.)

In article twelfth we have an account of the New Orleans Charity Hospital. The extent of this hospital and its means of relief may be inferred from the fact, that, in 1849 the total admissions were 15,563; total discharges, 12,134. The deaths during the same time were 2,739. This shows a mortality of $17\frac{1}{2}$ per cent. of the admissions—a large rate, but it occurred during the prevalence of one of the most destructive diseases—cholera. Many were admitted in a moribund state, or beyond the reach of remedies.

Of the above number of patients admitted, there were from

United States, - - - - - 1,782

Foreign countries, - - - - - 13,034

Unknown countries, - - - - - 142

The number of natives of Louisiana who were inmates of the hospital, was only 147. In how many ways is this great country the refuge of the people of the old world!

In another article, the organization of the State Medical Society of Louisiana is mentioned, and the nature and character of the standing committees are specified. They evince a laudable determination on the part of the physicians of Louisiana to keep up with the requirements of the present time, for the support and extension of the different branches of medical science.

All the reports hitherto noticed are from Louisiana.* Next follow those from Alabama. The initial one, by Dr. Bassett, on "the Climate and Diseases of Madison County," consists of much useful description, pointed and sometimes irrelevant references, and clinical reports. His biblical commentaries on the use of chloroform are at least amusing. When quoting the authors by whom cold bathing is recommended in Scarlatina, Dr. Bassett might have included Dr. John Bell, who, probably more than any other American physician, has emphatically exhibited its efficacy, first in his work on Baths and Mineral Waters, and subsequently in his published Lectures on the Theory and Practice of Physic, and in his late Treatise on Baths and the Watery Regimen.

The second article of the "Reports from Alabama," is entitled "Contributions to the Vital Statistics of Mobile, by George A. Ketchum, M. D." The mortality among the white population is much greater than among the black; and, in the former, more among the males than the females. The disparity in the case of the white males may be accounted for by their greater number, owing to so many of them coming without families to Mobile, to engage in business.

"Among the blacks the greatest mortality is among the infants under one year of age, and next between one year and ten."

Next comes an account of the Mobile Medical Society, and an

* The repetition before each article of the general heading, "Reports from Louisiana," is unnecessary. It would be enough were it to precede article first.

Abstract of its Proceedings. These consist of notes of interesting cases and remarks of the members, embodying, altogether, much useful information.

"Dr. Ketchum related the following instance of precocious development that he had met with in a family of negroes. The mother, Diana, was just thirteen years of age when her first child was born. This child, Tyra, was now twelve years and three months old, and has been menstruating eighteen months. She was three months advanced in pregnancy. Her breasts are large and full, though otherwise she has the appearance of a young girl of eight or nine years of age. Her younger sister, Mary, is just nine years of age, and has been menstruating regularly since the spring of 1848. If Tyra carries her *fœtus* until term, her mother will become a *grandmother* before she is twenty-six years of age."

Cases were related by Drs. Walkly, Ketchum, Ross, Anderson, and R. L. Fearn, the President, in which chloroform had been used with success. One was of "convulsions in a small child, in which all the usual remedies had failed to procure relief, and the child was fast sinking. He had chloroform administered by inhalation, and the convulsions had ceased, and the child had up to this time remained free from any recurrence of them." Dr. Walkly related another instance of the good effects of this treatment in the case of a child, fourteen months old, in whom the convulsions were confined principally to the right side. Dr. Anderson adduced a case coming under his own observation, confirmatory of this practice. The administration of the chloroform was kept up several hours, "on account of the tendency that the convulsions manifested to return. He thought that about $\frac{5}{6}$ i. of the article had been used."

"Dr. Fearn reported two interesting cases of labor in which he had used chloroform with much benefit."

Dr. Ketchum has used chloroform successfully "in a violent case of hysterical convulsions occurring in a young woman, twenty-one years of age;" also "in a case of tedious and difficult labor." He found the topical application of chloroform to give relief in a very painful neuralgic affection of the face and one side of the scalp. "The patient was entirely relieved by wetting a handkerchief with a few drachms of the article, and applying it along the painful course of the nerves"—[the course of the pained nerves."] This article was used by Dr. Walkly in three cases of *trismus nascentium*, but without any good effect.

A case of nyctalopia was described by Dr. Ketchum, in which he gave a purgative of blue mass and rhubarb in the evening, and on the following morning fifteen grains of quinine were administered. "There was no return of the affection from this time."

The fourth article from the Alabama Reports, consists of Transactions of the State Medical Association, in the form of reports on Topography, Meteorology and the prevalent diseases. Dr. Fenner, after speaking of them in high terms, says: "They have been published in the New Orleans and Augusta Medical Journals, from which we shall select such as we think are most valuable."

/ An advantageous specimen of these reports is furnished in the paper by Dr. Bates, "On the prevailing diseases of a portion of Dallas County. Read before the Alabama State Medical Association, at its sitting in Wetumpka, on the 7th and 8th of March, 1849."

In the treatment of Bilius Remittent Fever, Dr. Bates rarely practices general bloodletting, unless in cases complicated with engorgement of internal organs—quite a common condition of things, he might have added—when local depletion is had recourse to. His course is a mildly antiphlogistic one. So soon as a remission is observed, he gives sulphate of quinine, and if there should still be some excitement, he combines with this article a small portion of ipecacuanha and morphia.

"Of the 16 cases of typhoid fever that came under my notice, 6 were whites and 10 were blacks; all adults. Of the former, three proved fatal; of the latter, five. There were two cases occurring among the whites, and the same number among the slaves, that I term malignant typhoid, in contra-distinction to the others, from the severity of the symptoms and the rapidity of their course. The symptoms were different from those we usually see in typhoid fever, and in some respects assimilated those of malignant bilious fever. It is a difficult matter, I apprehend, to explain the combination of appearances, unless we suppose that the causes which produce remittent fever, modified considerably the idiosyncrasy of the individual in whom was developed the typhoid type."

Details of these cases are given by Dr. Bates.

Congestive Fever is next described by the author, who gives his views of its pathology, and the treatment which he adopts for its cure. There is no lack of active medication: "quinine and stimulants, with camph., opium and aromatics, are administered in-

ternally; while sinapisms, the hot air bath, dry frictions, and blisters to produce their full rubefacient effect, are applied to the extremities, spine and epigastrium. The patients bear quinine in large doses admirably, and I have frequently given 100 grains in a few hours without any other complaint than a little ringing in the ears. After reaction is in a measure effected, calomel in small doses, with opium, is given to correct the secretions, if necessary, while the quinine is continued to prevent a recurrence of the collapse. Perfect rest is enjoined the whole time."

In the treatment of the anginose variety of scarlatina, Dr. Bates recommends a mild antiphlogistic treatment—a mild laxative and a soothing diaphoretic, sometimes sponging with cold water. If the throat was greatly inflamed, "the tonsils were scarified with a common gum lancet, and then touched with a camel's hair brush and a solution of nit. silver, 10 grains per ounce, three times daily, until the soreness had in a measure disappeared. In some instances, the solution was gradually increased in strength from 22 to 25 grains. In not a solitary instance, where this course was pursued, was there ulceration or chronic engorgement, or enlargement of the tonsils, after the subsidence of the disease."

Georgia furnishes her contribution to these reports in a long and elaborately written paper by Dr. Pendleton, entitled "A General Report on the Topography, Climate and Diseases of Middle Georgia." In the positive, we are favored by the author with a description of the soil, face of the country and atmospherical states of the region. In the speculative and conjectural, he entertains us with his views of miasmata and the etiology of periodical fevers. The first is fresh and original; the second places him in the crowd of those who travel in the road of hypothesis.

The diseases of Middle Georgia have undergone, as we learn from Dr. Pendleton, a considerable change within the memory of man, both as regards their pathology and general fatality. "Formerly bilious remittent fever was a very fatal type of disease; now, I hesitate not in making the assertion, that uncomplicated remittent fever, as it prevails in Middle Georgia, never proves fatal, under a judicious and scientific treatment, if taken in time. I doubt not the virulence of the disease has greatly abated in late years, and even under the old plan of treatment, the mortality

would not now be so great. But when we remember that the sole object of the practitioner of that day seemed to be to mercurialize his patient—particularly if one or two heavy charges of drastic purgatives did not succeed in ejecting the enemy, and during the whole course not a drop of cold water was ever allowed, no matter how dry the tongue or how burning the thirst, we wonder no longer at the greatness, but rather at the smallness of the mortality. Luckily for suffering humanity, a few wise heads soon discovered that every patient who obtained water by stealth, recovered, and those who did not, died, or suffered long before recovery; a consequent modification was made in the treatment, which has been still farther improved upon, under the benevolent light of the Broussaian philosophy, until the monster has become a mere child, to be throttled and overcome by every tyro in medicine."

As regards the morbid effects of particular seasons on the animal economy, Dr. Pendleton, referring to the district described by him, tells us "what has grown to be an adage in the Southern States, that a wet spring and summer, with a dry fall, will produce a sickly season."

"Of what are generally termed idiopathic fevers, we have the common continued, inflammatory, bilious remittent and intermittent—the first two prevailing mostly in the cold months, and the last two in summer and autumn. The common continued fever frequently takes on a typhoid type after the first or second week, and hence has received that name by many physicians throughout the country. It is better known among the common people as the '*slow fever*,' from the tedious course it runs, frequently terminating either favorably or unfavorably at the end of the fourth or fifth week. I doubt not the true pathology of this disease is a sub-acute inflammation of the mucous membranes, originating in atmospheric vicissitudes, or supervening on the partial subduction of more violent fevers. The stimulating plan of treatment, as brandy, morphine and quinine, has consequently resulted most disastrously to all who have been brought under its influence. On the contrary, the *expectant* plan, of gentle antiphlogistics and counter-irritants, has relieved at least 19 cases in 20, as my tables will show."

Dr. Pendleton exhibits, in a tabular form, the number of cases of the different diseases which occurred in his practice in Hancock County, since 1843, and next of those of the deaths. We insert his summary view of the proportionate mortality. "Thus, out of

2,039, we have 60 deaths, being 2.94 per cent. The mortality of diseases of the digestive organs is 3.33 per cent.; the respiratory, 5.89; diseases peculiar to women, 3.2; brain and nervous system, 5.2; eruptive fevers, 4.4; idiopathic fevers, 0.34; and urinary, 1 in 52. It is remarkable that the mortality of idiopathic fevers is so small—there being of periodic fevers not a single death—of continued fevers, only 2 in 44; making a mortality of 4.4 per cent. This latter embraces that fearful type of fevers generally denominated typhoid. The result of the table certainly speaks volumes for the healthiness of our region in comparison with many other sections of the South."

Dr. Pendleton has written "On the Susceptibility of the Caucasian and African Races to the Different Classes of Disease." This paper first appeared in the Southern Medical Journal, and is now transferred to the "Southern Reports."

"The ratio of deaths, according to the number of cases, is 2.57 for the whites against 3.54 for the blacks." The whites are more subject to diseases of the primæ viæ than the blacks; the latter more to pulmonary affections than the former. There is greater call for medical assistance from the negro than from the white women, in the proportion of 15.2 to 10.5 per cent. The blacks are more subject to rheumatism, urinary affections and diseases of the teeth. The whites are much greater sufferers from idiopathic fevers, also, by a small per centage to diseases of the eye and exanthematous affections.

"With regard to the sexes, we find that the males are more subject to diseases of the digestive, respiratory, urinary and visual organs, as also the brain and nervous system, while the females, apart from diseases peculiar to them, are more liable to the exanthemata, rheumatism and diseases of the teeth. The females predominate over the males by a considerable per cent., in the general liability to disease. Thus, out of 1549 cases, we have 924 females, against 625 males. Abstract from those 204 for diseases peculiar to women, and they still have a considerable ascendancy. But the diseases of females are less fatal in their character than those of males. Thus, out of the 924, we have 26 deaths, or 3.2 per cent. of females—while out of the 625, there are 20 deaths, or 3.2 per cent. of males."

"Perhaps the most remarkable fact connected with this table, as relates to the sexes, is the great preponderance of the males in idiopathic fevers. This being as 20.6 per cent. against 9.6; more than two to one."

Dr. Pendleton concludes his instructive paper in a tone of Christian philosophy, in the monition furnished to us by the infirmities of age and the more sudden inroads of violent disease:

"The lesson it teaches us of our mortality, is too obvious for the wise not to heed its healthful instruction and solemn warnings, and the good physician should always carry about him a medicine 'to minister to the mind diseased.' It is not found in our apothecaries' shops, nor is it indigenous to this clime; but still it may be obtained 'without money and without price.' It is the Elixir of Immortality."

"A Strange Case of Insanity," is the heading of a brief narrative of insanity, induced in a lady in Georgia, by fright from falling from a carriage. She was for some time in the Bloomingdale Asylum, but returned home without being cured of her malady. Her disposition had become, contrary to her wont, gay; and in conversation she evinced great sprightliness and wit. The house in the country in which she was residing took fire and was burned. But this disaster, by giving rise to terrible fright, "completely restored her to her right mind."

The organization and the names of the officers of the State Medical Society of Georgia, are furnished at page 344.

Under the head of Reports from Mississippi, we find an account of "the Topography, Meteorology and Climate of Jackson, the capital of Mississippi." By Dr. S. C. Farrar.

The author of this paper gives a lively sketch of the state of society and the causes of disease, and the defects of medical treatment, in the early settlement of Jackson, which, by the way, dates no farther back than 1832; and he contrasts them with the improvement in all these particulars at the present time. A large influx of both white and black settlers, the latter being slaves, unacclimated and over-tasked; the first owing to various speculations and anxious efforts to better their fortunes—the second to excessive field labor, furnished large materials for disease, the victims to which were increased by intemperance. "At almost every cross road a small cabin was erected, which, in common parlance, was denominated 'a dogery.' "

Old physicians retired from practice; others abandoned it to engage in the less arduous and more attractive work of speculation. "Young physicians flocked to the State, chiefly from the schools of Lexington and Philadelphia, thoroughly indoctrinated with the pecu-

liar opinions as to the origin and treatment of fever, entertained by two distinguished Professors filling the chairs of the practice of medicine in those schools; hence, in the treatment of fever, the lancet was frequently unsheathed, and calomel administered in large and repeated doses. When this failed to cure, ptyalism was resorted to; and that powerful anti-periodic, the Sampson of the *materia medica* in malarial fevers, quinine, was given in comparatively insignificant and feeble quantities. Up to this period, few if any had ventured to prescribe it in the heroic and jugulating doses of the present day."

The contrasted and gratifying picture to all this is given in the following terms by Dr. Farrar:

" Since then we have become better acquainted with the pathology and treatment of Southern diseases—we resort less to the lancet and heavy doses of calomel. We rely only on aperients, diaphoretics, opiates, salt water, enemata, cold drinks, sponging with cold water, affusions of cold water, sinapsed foot baths, occasionally dry and wet cups and blisters; but above all, on the use of *quinine in sedative doses*. Since this change in practice, our intermittent and remittent fevers are more manageable, and even that terrible disease, *algid malignant intermittent* or congestive fever, has lost much of the horror it formerly inspired, and is far less intractable. But we are also exempt from many of the corroding cares and anxieties of 1833 and 1834, those years of speculation, when we were buoyed up one day with the expectation of riches by some lucky turn in the wheel of fortune, and the next, depressed by blighted hopes and ruined prospects. Now we enjoy more composure, we are better lodged and fed than formerly; our bodies are invigorated by labor and exercise; our supply of food is abundant, varied and wholesome, we are not constantly *upon the alert* for persons to victimise by bargain and trade; the days of banks and chimerical prospects have passed by, and now, *with few exceptions*, our citizens look not to lucky speculations nor to the placers of California, but to the bowels of our own soil, for gold. Most of the liquor-shops have been abandoned, demolished or converted to other purposes; and in every hamlet and town of the State, the Sons of Temperance have unfurled their banner, bearing on its ample folds the motto, *'love, purity and fidelity.'* They visit the habitation of the intemperate, carrying in their bosoms the feelings and sympathies of the good Samaritan, and on their tongues the language of love, and hope, and consolation. They admonish, they entreat the intemperate to abandon their habits, and flee the path that leads to ruin, disgrace, disease and death. Their friendly counsels make a deep impression, and frequently the inebriate is reclaimed, and goes forth again into society, with the sentiments, and aspirations, and dignity of man.

Now, acclimation, good food, pure water, exercise and temperance all contribute to render us less liable to disease; and when it comes, the system responds more readily to medicine."

Dr. Farrar describes an epidemic of measles which began in January, 1849, and prevailed for some weeks; and also one of erysipelatous fever, "the black tongue" of some writers, which appeared in February of the same year.

An overflow of the banks of Pearl river, on which the town of Jackson is situated, followed by a recession of the water, was productive of intermittent fever, from which scarcely a family escaped. Dr. Farrar, strengthening his remarks by the experience of Cleghorn, says, that "no disease is more disposed than tertian intermittents, to present anomalous symptoms, or to appear with a portion of the livery of other diseases." If it were necessary, this position might be still further strengthened by reference to Torti, Alibert, and others, who describe masked intermittents, (*febres larvatæ.*)

The second report from Mississippi is an article on Epidemic Cholera in the vicinity of Natchez. By C. H. Stone, M. D. This will repay perusal, but we have room for only one extract:

"A comparison of the different reports will no doubt show *the almost simultaneous formation of the cholera poison throughout a great, if not the whole, extent of the valley of the lower Mississippi*; not travelling *up* the river from New Orleans, nor *down* from Memphis or Vicksburg, but like a vast, dread pall, impending over this great valley, and settling here and there, first on its heart and great trunk, then its numerous rivers, lakes, and extensive plains, shrouding thousands in death."

Following this paper is another on Epidemic Cholera and its Preventive Treatment. By G. S. Magoun, M. D. It has the merit of brevity. He designates it as "a crude essay." He is either too modest in thus underrating the value of his production, or he is too frank in telling his readers what little pains he has thought necessary to take for their edification.

Dr. Clemens, of Macon, Mississippi, relates an operation for the removal of one half of the inferior maxilla, for osteo-sarcoma. The subject was a negro, aged about thirty-seven years. Dr. C. first saw him in June, 1847, and learned that the disease had begun to show itself in February, 1845. The use of iodine was persevered in for nearly a year, but without any good effect. The general health was much improved under the use of tonics, prescribed by Dr. C. On the 12th of September, 1847,

Dr. Clemens performed the operation of removal of the diseased bone "by sawing through just beyond the angle on one side, and near the symphysis of the chin on the other." On October 14th the wound had entirely healed, and the patient was discharged, apparently quite well. This is the first chapter in a surgical operation beyond which the narrator sometimes forgets to publish. The second, far from being an uncommon one, tells a different story, viz. of renewed disease, declining health, and finally death. Dr. Clemens, with becoming honesty of purpose, continues the history of this case, by telling us of his having, in April, 1849, seen the patient, for such he had then become, who complained of severe pain in the ramus of the maxilla on the side from which the tumor had been extracted. The advice of Dr. C. to have the affected bone removed at the articulation, was neglected. The disease continued to make rapid progress—a tumor larger than a man's fist had grown out, and the integuments at the lower part were ulcerated, and a dark fungus protruded. This was the state of things in August, when Dr. Clemens performed another operation, after having placed the patient under the influence of chloroform, and the carotid artery tied, as a precautionary measure, at the point where it is crossed by the omo-hyoid muscle. The operation is thus described :

"I now made an incision, commencing over the articulation and carried downwards along the posterior margin of the tumor, terminating at a point about midway between the angle and symphysis. Another incision was then made, commencing just below the first, and carried along in front of it, (so as to include the cicatrix of the former operation,) and terminating with it. The tumor was now separated, as far as practicable, from its attachments, the capsular ligament of the joint divided—the tumor turned over from behind, forward, pressed downward, the temporal muscle divided at its insertion, and the removal was effected.

"The haemorrhage was very trifling. The cavity was lightly filled with lint, and the edges of the wound brought in apposition with sutures and adhesive strips, and the parts supported with a light bandage. The healing process went on rather slowly, though by the fortieth day the wound was healed throughout. The ligature around the carotid came away on the twenty-fifth day. On the forty-second day from the operation the patient was again discharged, apparently quite well."

Notwithstanding these flattering appearances, in the course of three months the upper jaw on the same side became the seat of

disease, manifested by fever, and a tumor nearly the size of a hen's egg. The general health had again become bad. Under all the circumstances of the case, Dr. Clemens wisely declined any farther operation for the relief of the patient.

Dr. Joseph J. Pugh communicates a brief account of the "Artesian Springs" in Madison county, Mississippi. The water is *acidulated chalybeate*. Dr. Pugh bears testimony to its beneficial operation in various diseases—debility of the digestive organs, including diarrhoea and dysentery, also menorrhagia, amenorrhæa, fluor albus, functional diseases of the kidneys, unattended by inflammation; also in cutaneous affections, and in the distressing gastric irritation consequent on uterine diseases.

The first and only report from Tennessee is "On the Commencement, Prevalence, Fatality, Treatment, &c., of Pestilential Cholera, in Memphis and its vicinity; with the prominent facts bearing upon the unsettled question of its imported or domestic origin. By Lewis Shanks, M. D., of Memphis, Tenn."

Dr. Shanks advocates the contagious nature of cholera, basing his opinion on the facts observed by him and others, respecting the diffusion of the disease along the Mississippi and its tributaries. He writes:

"The question might fairly be asked upon this statement of facts—If cholera was not imported here from New Orleans—if it originated here from epidemic influence—why should nearly all the cases, for the first fifteen or twenty days, have occurred on a string of landing some two miles in length, contiguous to the steamboat channel, and no cases occur in the town, only a few hundred yards distant from the landing, but the two under the circumstances specified?"

From South Carolina, Dr. Thomas Y. Simons, of Charleston, sends a Report, which, by the way, first appeared in the pages of our able contemporary, the *Charleston Medical Journal and Review*, for September, 1849. It is entitled "Observations on the fever which is developed in the city of Charleston after exposure to the country air, during the summer and autumn, and which is hence called Country Fever."

The treatment of this fever is briefly sketched by Dr. Simons as follows:

"My plan is, if the bowels are confined to give a good mercurial purge of rhubarb and calomel, and upon the remission of the fever

to give two grains of quinine every two hours, until a sense of ringing in the ears or partial deafness ensues, or until the exacerbation supervenes—keeping the liver secreting by the use of blue pill every four hours during the day, and the bowels relieved when necessary, by injections; avoiding active cathartics, if possible. This plan is continued until the fever is arrested, which I have found generally to be after the second or third invasion. Sinapisms, blisters and rubefacients, or cold evaporating applications, are used likewise when indicated. I should not hesitate to use bleeding generally and topically during the exacerbation, but I deem these should be done in the earlier stage of the disease."

The author offers some judicious remarks of a prophylactic nature, and concludes his paper by the following suggestion.

"It is, to ascertain the localities which are healthy and those which are liable to fevers—the means of preserving the health of those which are now healthy and of correcting and ameliorating those which are sickly. It is a noble and philanthropic object, and one which should bring forth the energies and observation of every intelligent physician in the State. The State Medical Association has appointed a committee as regards this subject, which committee, it is to be hoped, will receive ample materials of information in the different districts and parishes in the State."

We can only state the fact of the appearance in these Reports, of an instructive paper on the Yellow Fever of Charleston, S. C., in 1849, by the editor of the Charleston Journal, in which it originally appeared.

Dr. Holmes, of Maybinton, S. C., gives his experience of the good effects of nitrate of silver, especially applied in anginose affections; of strychnine in paralysis; and belladonna in pertussis.

The next article is a brief notice of the organization and proceedings of the South Carolina Medical Association.

We may anticipate the collection and publication, in a few years, of an immense body of invaluable matter on the Medical Topography and Climate of the different sections of nearly every state in the Union, obtained through the methodical observations made by their Medical Societies.

Texas sends a report from Dr. Wright, surgeon in the United States Army, on "the Topography of San Antonio, and the epidemic cholera that prevailed there in the spring of 1849."

Dr. Wright begins his paper by appositely remarking: "He

who would sit down to write a paper on Cholera Asphyxia, at the present day, finds himself in many essential respects, like him, who would indite a treatise on variola, or pertussis, or intermittent fever; or like him who is constrained to elaborate a Fourth of July oration, or a eulogy on General Washington." Still is Dr. Wright, writing from personal observation, worthy of being read.

Dr. Jarvis, surgeon United States army, sends his quota, in the shape of a "Report on the rise, progress and decline of epidemic Cholera in the valley of the Rio Grande." The remarks just made regarding Dr. Wright, applies to the author of this paper.

The portion of the volume before us, called *Excerpta and Miscellanies*, consists of 1. "Experimental Researches on the action of quinine, especially in large doses. A memoir submitted to the Academy of Science.—By M. Brecquet. Report of MM. Andral, Rayer, and Lallemand. 2. On the treatment of the West India remittents and intermittents by quinine. By Dr. D. Blair, of Demarara. 3. Does calomel really expel the biliary secretion? By Dr. Michea. 4. The law relating to the importation of adulterated drugs, medicines, and chemical preparations into the United States."

It is very justly remarked in the opening sentence of article 4th, "The medical profession, as well as the entire community throughout the Union, are greatly indebted to Dr. T. O. Edwards, late member of Congress from Ohio, for his indefatigable and finally successful efforts to procure the passage of this most salutary and important law." Our readers will see, by reference to our advertising sheet, that Dr. Edwards has returned to the ranks of the profession, and will bring his talents and attainments into the service of the Medical College of Ohio, in which school he has been appointed Professor of *Materia Medica and Pharmacy*.

Notices of the medical colleges of the south and south-west, and of American medical journals, conclude the volume of "Southern Reports."

The pains which we have taken to exhibit to our readers the chief features, and most interesting details of the first volume of Dr. Fenner's *Southern Reports*, are the best proof of our desire to see a second volume next year. It would be a source of pleasing reflection to us if we could believe, that the language of praise and occasional criticisms which we have uttered, will encourage him in his future endeavours, and furnish him with hints to make his subsequent course more easy.

Essays on the Puerperal Fever, and other diseases peculiar to Women; selected from the writings of British Authors previous to the close of the eighteenth century. Edited by FLEETWOOD CHURCHILL, M. D., M. R. I. A., &c. &c. Philadelphia: Lea & Blanchard, 1850. (Reprint from the Sydenham Society's last publication.)

Dr. Churchill's collection of essays, taken from the written experience of seven distinguished physicians, on the subject of puerperal fever, is in every way worthy the respect of the profession. The author has not only given us the various monographs on the disease, commencing with that of Dr. Denman on the sickness of 1768, and terminating with Dr. Gordon's well known essay on the epidemic puerperal fever which occurred at Aberdeen in 1789, but he has greatly enhanced the value of the work by adding to the selected matter a short, condensed, but very interesting historical sketch of the different epidemics of puerperal fever which have at different periods swept off the unfortunate inmates of the various lying-in hospitals of Europe. He commences with a description of the fatal effects of this disease, and the mournful impression produced upon his mind by witnessing its ravages; "a picture," he adds, "whose gloom is heightened by the inutility of all precautions to guard against its attacks, and, in the majority of cases, the utter failure of all attempts to arrest its progress, or to prevent its fatal termination."

Impelled by such feelings, Dr. Churchill has presented to the reader a selection of such works upon the subject as in his judgment is best calculated to afford a complete view of the disease in itself, and especially of the aspect it presents when it occurs epidemically; and not only so, but by selecting descriptions of the various epidemics of England, Ireland and Scotland, the various characters of the disease, and its particular modifications are illustrated by those who witnessed them.

Dr. C. disclaims all intention of compiling a treatise on puerperal fever, his sole object is to collect the principal facts connected with its history as given by persons who witnessed its desolating course, and thereby afford the student and physician of our own time an opportunity of comparing the symptoms, treatment and mortality of the different epidemics, in order, if possible to do

away with that one sided view of the disease which persists in asserting that child-bed fever is inflammation and nothing but inflammation, an infatuation which we sincerely hope has nearly satiated itself with human blood.

However, we will not anticipate our author, but suffer him in due time to speak for himself, not having the vanity to suppose, though we have often felt as he feels, that we can write upon the subject with the same force and clearness.

According to our author, the first undoubted epidemic of puerperal fever on record is that which prevailed in Paris during the winter of 1746; it was extremely fatal, attacking the poor, and proving much more fatal to those *in hospital*, than to those who were delivered at their own houses. Of twenty women, in February of that year, in the Hotel Dieu, scarcely one recovered; they died between the 5th and 17th days after their confinement. As the post mortem appearances described afford nothing particularly new to the instructed physician of the present day, we do not think it desirable to consume our necessarily confined space by quoting them.

The treatment of the disease is not given.

After this we have a long list of successive epidemics, as they have occurred in the different lying-in hospitals of Europe, but as they are little more than a list of dates without detail, either of symptoms or of treatment, of course it would be useless, in a general review, to do more than allude to them as a portion of the history, though their perusal, we make no doubt, would greatly interest the enthusiastic student of the result.

The author, however, quotes largely from a M. Tenon of Paris, who says that "two distinct forms of the disease were successively observed in the years 1774-5. One a simple form, which was cured by ipecacuanha," which we should be inclined to suspect was not the disease at all; "the other, a complicated form for which there was no remedy, so that there perished one of every seven of those who were attacked, and death took place from the sixth to the eighth day, and often much earlier.

The following quotation is a good description of the symptoms of the milder cases:

"The first symptoms manifested themselves twenty-four, thirty-six, or forty-eight hours after delivery, and sometimes, but rarely, in

the space of twelve hours. The symptoms of the simple puerperal fever are developed in the following order: rigor, slight pain in the kidneys, intestinal colic, which in two hours affects the whole hypogastrium, and gradually becomes more acute, pulse concentrated, fever moderate, lochia not suppressed, mammae flaccid, tongue dry in the middle, covered with a yellow mucous on the edges, hiccup and vomiting of green colored matter. There was sometimes combined with these constant and characteristic symptoms, a diarrhoea of a bilious glairy matter, a considerable swelling of the hypogastrium, thirst, and remarkable retention of urine.

"In the complicated puerperal fever the pyrexia is more intense, with exacerbations; the tongue is black and dry, the belly is tense, distended and tympanitic and slightly painful. In some women the lochia have been either wholly suppressed or only diminished, others have experienced attacks of ophthalmia, in some the respiration was difficult, in general the blood showed the buffy coat.

"On opening the abdomen, the stomach, and intestines, particularly the small intestines, were inflamed, adhering to one another, distended with air and a yellow fluid matter. The uterus was contracted to its ordinary dimensions, and was seldom inflamed. I had occasion to dissect two; in one, the uterus contained a coagulum of blood; an infiltration of a milky appearance, or whey-like fluid, existed in certain women, in the cellular tissue surrounding the kidneys. Sometimes also a thick white cheesy matter was met with. When the lungs were gorged with blood, or inflamed, or emphysematous, an effusion of serum was found on each side of the chest. We did not observe the hemorrhages which occurred in the epidemic of 1664, and the uterus was not found dry and hard, and tumefied, as in that of 1746. In the epidemic of 1774 the lochia flowed, but they did not flow in 1746."

This valuable description blends together more than one epidemic, but as the disease is stated to have presented the same characters, the author has chosen to quote it in this place.

In the year 1782 the Royal Medical Society of Paris made a report to the French government on M. Doucet's method of treatment, whose remedy it appears was an emetic of ipecacuanha, followed by a gentle purgative, which is said to have been very successful. This certainly leads us to infer that most of his cases must have been of a very mild character.

From the year 1765 to 1775, puerperal fever appears to have prevailed in Derbyshire and the adjacent counties. Butler describes it, but its course must have been unusually mild, as Dr. Butler states that "ten grains of rhubarb and ten of aromatic con-

fection, given every day until the stools became natural, never failed to effect a cure." He objects to bleeding, very naturally, as the affection he describes must have been comparatively trifling. Dr. Gordon's cases in the epidemic at Aberdeen, 1789, are mentioned, with the treatment, which every body knows was bleeding—prompt and decided bleeding—irrespective of the state of the pulse; but as Gordon's valuable treatise has been for years in the hands of every practitioner in the United States, and as it is reprinted in the book, we shall make no further comment on it.

"Dr. Gooch has furnished us," says the author, "with the experience of Dr. Lowder, who practiced in London about this time." He, Dr. Lowder, "thought that the inflammation was erysipelatous, and the fever typhoid. When the inflammatory symptoms were well marked, he permitted a few ounces of blood to be drawn, but if the symptoms were typhoid, bleeding was positively injurious, he mentioned it as the assertion of many medical men that *all* the patients who were bled died. When the fever was typhoid, he recommended bark, and mentioned two cases apparently hopeless which recovered by taking daily a gallon of the decoction."

In 1809-10 Hey lost eleven patients out of fourteen, only three recovering; this was before Mr. Hey adopted Dr. Gordon's plan of taking blood largely at the beginning; he afterwards by the blood-letting practice saved fourteen out of seventeen. This was certainly being very successful, but we are much inclined to suspect, (though we approve highly of the sanguineous depletion in some cases) that he had to deal with a much less fatal form of the disease than when he saved but three out of fourteen; medical gentlemen are very fond of parading their successes, but they are not always so ingenuous as to tell us *all* the causes of their success.

We must apologise for the length of this list of epidemics, but though it may weary the mind with its monotony, it has the advantage of showing us what an amount of difference of opinion exists in the treatment of this disease; how different the various epidemics are in character; and that although large abstractions of blood may in one case be the only means of saving our patient, yet in another, so far from being beneficial, they will only hurry the miserable sufferer to her grave.

The author makes frequent quotations from Dr. Douglas, who has given a good account of the epidemic of 1810-11, as presenting itself in the Dublin Lying-in Hospital.

Dr. Douglas describes three varieties of puerperal fever, 1st, the synochal; 2d, the gastro-bilious; and 3d, the epidemic or contagious puerperal fever. Dr. Churchill observes, "that he (Dr. Douglas) has drawn a marked distinction between ordinary and epidemic puerperal," and as his description serves to illustrate in a measure our author's views on this subject, we make the following extract of his quotation from Dr. Douglas.

"That form of the disease which I arrange under the third head, is really the contagious, or epidemical puerperal fever, and though agreeing with the others in the great leading symptoms, inflammation, pain, tumefaction, and tension of the abdomen, yet differing from them in many material characters. The sensorium here is seldom in any degree disturbed, whereas, in others, it is so frequently, and even sometimes is excited to a high degree of delirium. The pulse here is usually from the moment of attack, soft, weak and yielding, and in frequency often exceeds 160; whereas, in the first species it is full, bounding, and incompressible, and in the second, small, hard and concentrated, and in both moderately frequent. The eye, instead of being suffused with a reddish or yellow tint, as in the others, is here generally pellucid, with dilated pupil; the countenance, instead of being flushed as in the others, is here pale and shrunk, with an indescribable expression of anxiety; an expression altogether so peculiar that the disease could, on many occasions, be pronounced or inferred from the countenance alone. The surface of the body, instead of being, as in the others, of a high pyrexial heat, is here usually soft and clammy, and of heat not above the natural temperature; and not only is the skin cool, with clammy exudation, but the muscles to the impression of the finger, feel soft and flaccid, as if deprived of their *vis insita* by the influence of the contagion. Indeed, there is such prostration of strength and depression of vital principle from the very onset of the attack, that I must suppose the contagion to act on the human frame, probably through the medium of the nervous system."

The author again quotes Dr. D. as follows :

"The contagious puerperal fever of Dublin is, I venture to pronounce, neither more nor less, than a malignant fever of a typhoid type, accompanied with an erysipelatous inflammation of the peritoneal covering of the stomach, intestines and other abdominal viscera."

The history, or more properly, the sketch of the different epidemics, proceeds from one to the other with great rapidity; that which occurred in 1813, in the northern countries of England, so ably described by the late Dr. Armstrong, is alluded to as closely

resembling the Aberdeen and Leeds epidemics, all the cases presented the same incontestable proofs of inflammation, and blood-letting—early and copious blood-letting—seems to have been the only successful mode of treatment. “All who were seized with the disease died,—who were not bled at the beginning.” This is in accordance with the recorded statements of Hey and Gordon, and was doubtless excellent practice in those epidemics which displayed a strong inflammatory type.

The experience of Dr. Gooch is next adduced. Dr. Gooch agrees in all the principal points of treatment, but makes, however, a quotation from Dr. Farre, who states that “At the east end of London, not far from the river, this disease proved still more fatal. During the month of March, 1825, one surgeon lost seven, another four cases, in all of which the disease was treated at the instant of its formation by active blood-letting. A physician accoucheur who attended in consultation, told him (Dr. Farre) that, out of thirteen cases eleven died, that *all* which had been bled, died, and that the only two that recovered had not been bled, but were treated with turpentine.

Mr. Labatt’s account of the epidemic that prevailed in Dublin in the years 1819–20, is highly interesting, and is well worthy of attentive perusal, both from its intrinsic merits and the high character of the author.

Mr. Labatt used every effort to prevent the spreading of the contagion; the sick patients were separated from the sound ones, scourings, fumigations, and white washings were called in requisition, but all to no purpose, neither cleanliness, nor ventilation, nor the destruction of the utensils and furniture that had been used by those already smitten, seems to have checked the march of the disease, nor lessened its frightful mortality. Dr. Labatt says: “That from sad experience of this epidemic, I am satisfied that the contagion of typhus fever is capable of giving rise to puerperal fever; that puerperal fever is communicable from one patient to another, and also that it can be carried from the sick by an attendant to women in child-bed who were previously free from disease.”

This statement is strongly confirmatory of the opinion that there is a contagious form of puerperal fever. Such, we believe, is the opinion of most physicians of the present day.

An epidemic puerperal fever occurred in Vienna in the year 1819. The patients were attacked on the first, second, or third day after delivery; symptoms of inflammation of the peritoneum and uterus were always present. One patient died in six hours after she was attacked, others in twelve or twenty-four hours.

When the disease presents itself in so malignant a form, one mode of treatment is as good as another, or to speak more correctly, all treatment is equally useless, the powers of life give way at once, and we should imagine a man would as soon think of plunging his lancet into such a patient as he would of bleeding a corpse. "The very rapid putrefaction after death, the dissolved state of the blood, the strikingly soft and tender state of the whole bowels, the heart, lungs, liver, spleen, kidneys, and particularly of the uterus, indicated a colliquative, putrescent condition of the whole system induced by the disease."

Dr. Robert Ferguson's experience is given by one Methor, who states that in the general lying-in hospital, in the years 1835-38, every plan of treatment was tried—bleeding early and copiously, amongst the rest, without producing any good effect, or lessening in the smallest degree the mortality. Seeing that no treatment was of avail, the hospital was closed from May to November. Dr. Ferguson adds, "That the present year, 1838, has exercised an exceedingly fatal influence in every species of fever, all of which were of the low, or typhoid type."

An epidemic prevailed in Paris in the year 1829, in the practice of M. Desormeaux. Mr. Tonnellé, who has described the epidemic, traced the morbid lesions with great care in no fewer than 222 cases. We insert the following condensed summary of M. Tonnellé's statements given by the author, not because they contain any pathological novelty, but to show how perfectly they agree with the post mortem observations of our own country.

"In 193 there were traces of peritonitis; in twenty-nine, or about one-eighth there were none.

"In 197 cases, or about nine-tenths, he found morbid lesions in the uterus e. g., simple inflammation of the uterine veins and lymphatics, and softening and putrescence of the uterine parietes.

"In 62 cases the ovaries were inflamed.

"In 90 cases there was inflammation of the veins; in forty of the lymphatics alone.

"In 49 cases the uterus was softened, superficially in 29, deeply in 20.

"In 29 cases there were the usual evidences of pleurisy; in six others an effusion of blood, and in eight of serum into the pleural cavities.

"In 27 cases the lungs were affected, viz., in ten there was pneumonia; in eight, abscess; in four, tubercles; in three, gangrene; in two apoplexy.

"There were purulent collections in the muscles in fourteen cases; in the joints in ten; and in the cellular tissue of the pelvis in six cases.

"Abscess of the liver existed in three cases, and of the pancreas in two cases."

The author adds, that "M. Tonnellé divides puerperal fever into three varieties; the inflammatory, the typhoid, which was the most frequent, and the anomalous or ataxic. "The more active remedies were general bleeding, leeches, ipecacuanha and mercurial salivation." It appears that fully one-third of the cases died.

Next we have the observations of Mr. Ceely of Aylesbury, who has described an epidemic which occurred in that city and its neighborhood in the year 1831, during the prevalence of erysipelas, which exhibited a mild, a phlegmonoid, and a typhoid form, the puerperal seems to have assumed analogous characteristics.

Mr. Ceely says that he had no opportunity of making a post-mortem in the acute cases, from which we presume that they all recovered, which, under active treatment, as far as our experience goes, they generally will. He examined some of the typhoid cases, and found most of the usual appearances, which have been described so often that it would be waste of space and time to repeat them.

"A report of the secondary midwifery institution at Vienna, by Dr. Bartsch, was published in the *Lancet*, in which it is stated that of 2218 women delivered at that institution between October 15th, 1833, and December 31st, 1834, 175 had puerperal fever, of whom 109 died."

In this report puerperal fever is distinguished from peritonitis and metritis as will be seen from the following quotation.

"The cases of puerperal fever occurred seldom under the form of puerperal peritonitis, but generally as inflammation of the uterine veins, giving rise to the production of puss in these vessels, and the general symptoms accompanying its absorption."

We confess that we are glad to see this distinction made between peritonitis and malignant puerperal fever; it is most rational, and will at once account for the different success of different modes of practice, point out in what cases we ought to bleed without hesitation, and where it would be advisable to use a discriminating judgment, and spare the vital power which is already sinking but too rapidly.

The following quotation is from Dr. Beatty's Report of the Lying-in Hospital, South Cumberland street, Dublin.

"The hospital was visited by this terrible malady twice during the period embraced by the present report. Both attacks took place in the month of January, and at each time erysipelas was raging as an epidemic in the surgical hospitals, and diseases of a typhoid type were very prevalent in the city."

Dr. Beatty lost eight patients out of thirteen. M. Voillemier, Paris, 1838, describes two forms of the disease, the inflammatory and typhoid. The inflammatory form generally yielded to active antiphlogistic treatment, though occasionally it terminated fatally. In the typhoid form the patients rapidly sank at the end of a few days or hours. There was no regularity in either lochia or milk. In a few cases M. Voillemier thought he could trace the origin of the disease to contagion.

"Epidemics of puerperal fever occurred at Rennes in 1842 and 1844, and have been described by M. Betral. The lymphatics were principally implicated, the veins being unaffected. The disease sometimes terminated in forty hours, but generally not before the fifth day. The mortality in the first epidemic was twenty out of twenty-four, and in the second, twenty out of twenty-two. There were purulent deposite in the lungs."

The disease also appeared in the Westminster Lying-in Hospital in the year 1842, an account of which has been given by M. Buddy.

A slight sketch of some other epidemics is then given, but as we labor under the apprehension of making our article too long, we omit them, and proceed to give an extract by our author, from Dr. McClintock, Rotunda Lying-in Hospital, 1845. The Dr. thus enumerates the peculiarities of the outbreak:

"1st. The very sudden and unexpected manner in which the epidemic appeared, without any of those precursory warnings which

have usually preceded its invasion. 2d. The remarkable circumstance, that of the fourteen children of the women attacked, five died: one of rapid trismus, one of erysipelas, and three of convulsions. 3d. That out of the ten fatal cases, nine were examined post mortem, which examination revealed the most extensive morbid appearances, quite adequate to account for death. 4th. During the same period that puerperal fever was in our wards, erysipelas was very prevalent in some of the surgical hospitals throughout our city. 5th. It is worthy of remark what a small detraction of blood was sufficient to bring on syncope in this epidemic. Nearly every case was bled as soon as the system had rallied from the rigor; but only one woman (who recovered) bore the loss of so much as fifteen ounces, whilst from six to eight ounces was about the average."

There are some other epidemics historically mentioned, but we presume that enough has been given to show the nature, and even to convey some slight idea of the merits of the article which cannot be appreciated too highly; though short, it must have cost the author much labour and research; and though he admits that the list is in all probability imperfect, yet we agree with him cordially that, so far, it is more complete than any with which we are acquainted. We recommend the careful perusal of it to all practitioners, along with the tables of the various epidemics, which the author has been at the pains to give us, in order to render it more intelligible, but which for obvious reasons could not be inserted here.

Having finished his summary, the author concludes with some few observations, rather as suggestions, to induce his readers to follow up the subject than as absolute inferences. They appear to us to be so judicious, that we shall make no apology for giving some of them, and as we before gave our readers a promise to that effect, we shall give them in Dr. Churchill's own words.

"I would remark then, in the first place, that there appears some especial connection between the epidemics of puerperal fever, and lying-in hospitals. I do not mean exactly to assert that these epidemics always originate with, and are kept up by, the hospitals; but I refer to the fact that we have no record of any epidemic independent of them in early times. The first in France, England and Ireland, occurred in the Hotel Dieu of the former, and the lying-in hospitals of the latter countries, and though our earlier authors allude to inflammation of the womb, &c., occurring in child-bed, they make no mention of its prevailing extensively as an epidemic."

The author then alludes to the almost universally admitted fact, that puerperal fever is always, or almost always, connected with local diseases, but adds that Dr. Copland, in an excellent article, has denied the universal presence of inflammation in the malady, and states that in one epidemic the only pathological characteristics observable were a remarkable alteration of the blood, general lacerability of the tissues, or loss of their vital cohesion soon after death. He adds, however, that such cases are rare.

We proceed with the author's remarks :

"I repeat my conviction that there are few if any cases of puerperal fever without local disease of the organs employed in parturition or the neighboring tissues; but are we therefore justified in asserting with Dr. Lee that puerperal fever is simply a local affection?

"I have latterly seen reason to doubt the truth of the view I formerly took, which was in accordance with that of Dr. Lee, and though I would wish to express myself cautiously and guardedly, I must honestly avow, that whilst I fully admit the existence of local disease, I do think that epidemic puerperal fever is something more than that, although I may not be able to define exactly what it is.

"We should be justified in this supposition I think on several grounds. First, the very remarkable variety of opinion as to its nature, would go far to prove that it cannot be the simple local disease Dr. Lee believes. For example, by some it is regarded as an inflammation of the uterus; by others inflammation of the omentum and intestines; by a third party as peritonitis; by a fourth erysipelatous inflammation; by a fifth and sixth as a *fever sui generis*, or with biliary disorder; by a seventh as a disease of a putrid character, &c. Such different views are hardly reconcilable with the notion of a simple inflammation."

We have long been of precisely the author's opinion, but he does not appear to have any very distinctly defined idea on the subject, and indeed the difference of opinion is so great, that it is hard for a man who seeks truth and not the gratification of his vanity, by the exemplification of some favorite dogma, to bring his mind to a conclusion. The arguments remind us forcibly of the history of the *ameleon*. The author proceeds with the following remarks.

"Then again look at the prevailing characters of different epidemics, and see how varied they are; in one the lochia are suppressed, in another they are profuse, in a third unaltered; diarrhoea is common in one epidemic, constipation in another; typhoid symp-

toms in one, ordinary fever in another. And as to remedies we find even a greater diversity: one very high authority recommends saline purgatives; another loses all his patients until he bleeds largely at the commencement; another loses those who are so bled. Calomel is the universal remedy in one epidemic, opium in another.

"Lastly, let any one compare a case of simple inflammation of the womb or peritoneum in child-bed, with a case of epidemic puerperal fever, their symptoms, course, and the effect of remedies, and I do not think that a doubt will remain upon his mind that, although the latter is a local disease, it is not exclusively so."

The author then enquires, what more is it than a local disease? discusses the peculiar effects of uterine phlebitis, states Mr. John Hunter's opinion that phlebitis destroys life by the extension of inflammation to the heart, a position which Dr. Arnott's investigations disproved, showing that it was probably owing to an alteration in the quality of the blood. "M. Bouillaud, in 1825, attributed the typhoid symptoms in phlebitis to the mixture of pus with the blood." Analogous results have been produced by injecting putrid matter into the system, and "Guthrie's descriptions," says Dr. Churchill, "of the characteristics of irritative phlebitis symptoms, &c., are very like those of puerperal fever."

Many authorities are quoted in support of the plausibility of the position that puerperal fever, occurring as an epidemic, is neither more nor less than typhus, modified by the peculiar condition of the female at the parturient time, and it is natural enough to suppose that those organs and their investments more immediately concerned in the process of labor, should, be most liable to be affected by the vitiated condition of the general system, and take on an unhealthy inflammatory action, producing all that local mischief which Dr. Lee and others have maintained is the whole disease.

When we take into consideration the fact that typhus and erysipelas frequently appear together, and during the same atmospheric conditions, the supposition that the local affection is of an erysipelatous character, is extremely plausible.

The following quotation from Mr. Nunnelly, is corroborative of the author's opinion on this subject.

"It is highly probable, if not certain, that there is some change produced in the state of the blood, which change may depend upon alterations we are unable at present to appreciate, but which it is

likely occur in many tissues, and may thus affect the mass of the blood more or less quickly, and to a greater or less extent, according to the influence they have upon, and the connection they have with the blood in a state of health."

The important subject of contagion is then discussed—various high authorities, both for and against the contagiousness of child-bed fever, are quoted ; the author does not seem to be fully satisfied on this subject, but all that he says has been before the medical public so often, that we think it unnecessary to trouble our readers by calling their attention particularly to his opinions. They are, nevertheless, worthy of great respect, and may be read with advantage. One observation we quote as follows :

"As in all cases where a disease is epidemic, it is and must be a difficult thing to decide as to the contagiousness of puerperal fever; still I confess that the facts would lead me to the inference that, at least, it is communicable from a woman laboring under it to others in the same ward."

These remarks naturally lead to the consideration whether puerperal fever can or cannot be conveyed by a third party in health, from a person laboring under it to another person in child-bed. This is a subject of momentous importance to the practitioner of midwifery, and one which we heartily wish could be determinately settled; if it be as some have thought, (Gordon amongst the rest) that the medical attendant himself carries death into the chamber of his confiding patient, every conscientious man who meets with a case of puerperal fever, of a typhoid character, must be subjected to a fearful anxiety, for he must either continue his practice at the conscious hazard of destroying those entrusted to his care, or he must impoverish himself by abandoning his professional duties, a hard alternative to a man dependent for his living on such exertions.

Dr. Churchill does not seem to have settled this question either way to his own satisfaction, and certainly does not satisfy his readers ; he says :

"So far as the weight of opinion goes, it is in favor of contagion, but I think we are scarcely yet in a position to speak quite positively."

After quoting many anecdotes of cases, in which the authors (men of high repute) assert that in their judgment the epidemic

was conveyed by the attending physicians from the sick to healthy women, he makes the following commentary: "'Post hoc' is not always 'propter hoc,' however, and we must not forget that puerperal fever was epidemic at the time." This remark has particular reference to some cases which occurred in Edinburgh in 1821-2.

The author winds up with the following remarks:

"The evidence and proofs thus adduced are of extreme importance, and I fear we must conclude, however reluctantly, in favor, not only of the contagiousness of puerperal fever, but of the possibility of its contagion being carried by an intermediate party. This makes the practice of midwifery doubly distressing during the prevalence of an epidemic, and ought deeply to impress us with the necessity of the utmost care and caution."

The article closes with the following quotation from Dr. Copland.

"An obstetric physician should not make an autopsy of a case of puerperal fever or of erysipelas, or of peritonitis, or of diffusive inflammation of the cellular tissue, or of the disease occasioned by the necroscopic poison; nor even attend, dress, nor visit any of such cases without observing the utmost precaution with regard to ablution and change of clothing, and allowing two or three days to elapse between such attendance and midwifery engagements, or visits to puerperal females."

We have thus traced, as connectedly as our space would admit of, the original portion of Dr. Churchill's book, viz., the historical sketch of puerperal fever. The essays, though never before published together, have been in the hands of the profession many years, and have been reviewed and commented on so frequently, that further notice of them would be

"As tedious as a thrice told tale
Vexing the dull ear of a drowsy man."

We will only add that the work as a book of reference is invaluable, and ought to form a part of every medical library.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1850.

ASSIMILATED RANK.

On motion of G. C. M. ROBERTS, M. D., the following preamble and resolutions were unanimously adopted by the "Medical and Chirurgical Faculty of Maryland," at its convention, held June 5, 1850:

Whereas, Success in the medical profession requires intelligence, sound morality, and competent knowledge of the principles of medicine, as well as liberal education; and, *Whereas*, humanity and patriotism alike demand that all our fellow citizens who serve the Republic in the Army and Navy should be, when sick or wounded, accompanied by physicians as well instructed as any our country affords; therefore

Resolved, That the critical examination of candidates for admission into the Medical Departments of the Army and Navy tends to the improvement of medical education, and to secure competent medical officers in the military service of the country.

Resolved, That properly qualified members of the medical profession are *socially* the equals of members of any branch of the Army and Navy, and therefore should be assigned by law a respectable position in every military community.

Resolved, That the "MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND" regards with approbation the law of the United States which confers military rank upon medical officers of the ARMY, because it secures them an equality of rights and privileges with officers of other staff departments.

Resolved, That the "Medical and Chirurgical Faculty of Maryland" earnestly recommend that a similar law be enacted by Congress to place officers of the medical department of the NAVY on an equality of rights and privileges with other officers of this branch of the national defence.

Resolved, That the Secretary of the Faculty be, and is hereby directed to transmit immediately, copies of these resolutions, properly signed by the officers of the Faculty, to the Secretaries of War and of

the Navy, through the chiefs of the medical department of each service at Washington, and to the President of the Senate and Speaker of the House of Representatives of the United States, in order that the attention of Congress may be invited to the subject.

From the minutes.

W. H. DAVIS, Secretary.

Extract from a pamphlet on "Assimilated Rank in the Navy," by a (presumed) Passed Midshipman.

"A law of Congress entitled, An Act for the better government of the Navy, approved April 23d, 1800, provides for the distribution of prize money according to the rank of officers in the Navy and Marine corps. Article 1st, provides for the proportion of commanders of fleets and squadrons, and commanders of single ships. Article 2d, provides for sea-lieutenants, captains of marines, and sailing masters. Article 3d, provides for chaplains, lieutenants of marines, surgeons, pursers, boatswains, gunners, carpenters, and master's mates.

"In each of these cases the order in which the different grades are enumerated, and the amount of prize money conceded, is indicative of the rank of the officer specified. Being a law of Congress, fully approved, it is as much a supreme law as any other portion of the existing naval code of which it forms a part, is in full force, and can only be repealed by the passage and approval of another act."

Whether the complement from this association or classification is in favor of the "boatswains, gunners, carpenters, and master's mates," or in favor of "chaplains, lieutenants of marines, surgeons, and pursers," is a question not discussed by our author, who seems to be satisfied that the law is good and sufficient, and that *his* reading is the true one.

R.

RESIGNATION OF PROFESSOR DUDLEY.

We learn, from the *Transylvania Journal of Medicine*, that Prof. B. W. Dudley has resigned the chair of Surgery, which he has occupied for more than a quarter of a century. Dr. Dudley is well known as one of the most distinguished surgeons of our country, and is especially celebrated for his unprecedented success in the operation of lithotomy.

LIEBIG, the distinguished chemist, is about to visit the United States, and contemplates giving a series of lectures in the various cities.

From the N. Y. Medical Gazette we glean the following items of medical news :

RESIGNATION OF PROF. MOTT.

Dr. Valentine Mott, professor of surgery in the University of New York, has tendered to the proper officers his resignation. The cause which led him to take this step, was the appointment of Dr. Detmold to the chair of Theory and Practice. Dr. Mott, it appears, was in Europe at the time, and transmitted his resignation, conditioned upon the continuance of the appointment of Dr. Detmold; whereupon Dr. Detmold promptly resigned the chair to which he had been appointed, and it is understood *both* resignations have been accepted.

Dr. Hull, of Baltimore is about to issue a new monthly paper, to be entitled the "Baltimore Medical and Surgical Journal."

Dr. Van Buren, of New York, has lately removed successfully an ovarian tumor, of fibrous character, by the large abdominal section. The same surgeon has successfully performed amputation at the hip joint.

The Medical Faculty of the University of New York have published an official invitation for applications to fill the two vacant chairs in that institution, viz., the Professorship of the Principles, Practice and Operations of Surgery, and that of the Institutes and Practice of Medicine.

HOMOEOPATHY CONDEMNED BY THE LAW.

Marine Court.—Before Judge Lynch. Homœopathy.

E. Rossi Corsi v. Max Maretzek.—To recover \$100, balance for services as singer at the Opera House, the defence to which was that plaintiff had incurred a forfeiture of \$100 by not performing, or personally giving notice of illness, under certificate of the Doctor of the Opera House, on February 23, agreeable to the regulations already referred to. The decision in this case as to Homœopathic physicians having been somewhat misunderstood, we give the portion of the opinion which refers to it.

"The Court, after stating that it was shown by physician of plaintiff, and who it is said was proved to be a regular M. D., that plaintiff was unable that night to perform, and expressing its concurrence in the view

that at such an establishment as the Opera House, strict discipline should be maintained, and the penalties upheld, says : ' But I feel bound to regard the rule of evidence which requires in cases of penalty and forfeiture, strict proof of its being incurred—the objection to the evidence of the attending physician is technical and strict, and before defendant can avail himself of it, he must show that he has fully complied with what was to be done on his part. The rule stuck up at the Opera House is in these words : ' *Sickness must be proved by the doctor employed by the director.*' Now, though it is proven there was a notice posted up in the Opera House that Dr. Quinn was employed by the director, yet *it has not been proved on this trial that Dr. Quinn was a doctor, or that he had taken a degree as Doctor of Medicine, or that he was authorized by the Medical Society, or had a regular license to practice, which I think was necessary in order to constitute him a doctor, and to show a regular appointment under the rule*, and which I do not feel at liberty in such cases to supply by inference. So far as there is evidence on the subject, it went to show that *Dr. Quinn practiced upon principles of homœopathy, and that such practitioners are not recognized by the faculty of medicine, nor by a majority of the public, as regular practitioners.* Under these circumstances, I am of opinion that plaintiff was authorized to make proof of his sickness by his attending physician; and as such proof was made to my satisfaction, I think the plaintiff is not subject to the fine, and give judgment in his favor for \$100, the amount.' "

DEATH OF THE PRESIDENT OF THE UNITED STATES.

This melancholy event, which has shrouded our land in mourning, took place under circumstances which are well calculated to illustrate the importance of a much stricter regard to the laws of health and life, of which we have taken occasion to speak in a former number of the *Gazette*, than is usually exercised on the part of aged persons, whose vitality is inadequate to sustain a severe shock of disease.

It has been stated in the newspapers, that the death of Gen. Taylor was caused by a bilious remittent fever of congestive character, superinduced by an attack of Cholera Morbus. But what were the pre-existing causes to which the onset of this latter disease is to be ascribed? On the same authority we learn that the illustrious chief passed the day in a crowded assembly participating in its celebration by exposure to a temperature of near 90° in the shade, until he returned home in a state of exhaustion and hunger, which prompted him to indulgence of

a full meal, of which he felt urgent need. Of the extent of this meal, and the variety of dishes of which he partook, we have not been accurately informed, but it is stated that he ate heartily of *boiled cabbage, stringed beans, cucumbers, cherries and other raw fruit, with milk*, while his system had been enfeebled by long fasting, toil and heat, as well as by the excitement incident to the occasion.

That such a meal, under such circumstances, by a man of 66 years of age, was indiscreet, cannot admit of a doubt, even if these several articles were eaten in moderation as to quantity. Digestion and nutrition of such a medley of ingesta, were wholly out of the question, and hence all these combustibles became subject to chemical laws; and fermentation in the stomach, and the subsequent explosion called Cholera Morbus, might have been predicted with certainty, especially in a temperate man, who habitually abstained from stimulating drinks, as did General Taylor.—*N. Y. Med. Gaz.*

MACLISE'S SURGICAL ANATOMY.

We have received from the publishers, Messrs. Lea & Blanchard, the third number of this admirable reprint, containing the Surgical Anatomy of the Inguinal and Femoral Regions most graphically depicted. We are obliged, for want of room, to postpone the critical examination of it until a future number. In the meantime, we feel safe in saying, that it contains the best exposition of the different varieties of hernia that we have ever met with.

Dr. T. O. EDWARDS, of Cincinnati, has been appointed Professor of Materia Medica and Pharmacy in the Medical College of Ohio.

We regret to learn the death of DR. JOHN T. SHOTWELL, Professor of Anatomy in the Medical College of Ohio. He is said to have died of Cholera.

ERRATUM.

The word *spasmodic*, in the third line of Dr. SLUSSER's article on Nitrate of Silver, should read *sporadic*.

Deaths in Philadelphia from June 22d to July 20th, 1850. Reported by Mr. JAMES AITKEN MEIGS, Student of Medicine.

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Anæmia,	0	1	Fever, typhoid . .	3	3
Aphthæ,	0	3	“ typhus, . .	3	1
Apoplexy,	14	0	Fracture of skull, . .	0	2
Asphyxia,	0	2	Gangrene of foot, . .	1	0
Asthma,	0	1	“ lungs . .	1	1
Burns and Scalds,	1	3	Hæmoptysis,	1	0
Cachexia,	0	1	Hemorrhage from gums, . .	0	1
Cancer,	1	0	Hernia,	3	0
“ breast,	1	0	Hydrocephalus,	0	36
“ liver,	1	0	Hydropericardium,	1	0
“ stomach,	3	0	Hydrothorax,	1	1
“ throat,	1	0	Inanition,	0	7
Caries of spine,	0	1	Inflammation of brain, . .	6	25
Casualties,	7	9	“ bronchi,	4	6
Cholera,	4	0	“ heart,	1	1
Cholera infantum,	0	211	“ kidneys,	1	1
“ morbus,	7	5	“ larynx,	0	3
Concussion of brain,	0	1	“ liver,	2	1
Congestion of lungs,	0	4	“ lungs,	5	15
“ brain,	3	13	“ peritoneum,	1	1
Convulsions,	1	60	“ stom. & bowels,	5	14
“ puerperal,	2	0	“ uterus,	2	0
Croup,	0	4	Intemperance,	3	0
Cyanosis,	0	3	Intussusception,	1	0
Debility,	3	11	Jaundice,	0	2
Dementia,	1	0	Malformation,	0	4
Diabetes,	2	0	“ of heart,	0	1
Diarrhœa,	13	30	Mania-a-potu,	9	0
Disease of brain,	2	11	Marasmus,	1	42
“ chest,	0	1	Measles,	0	4
“ heart,	7	1	Old age,	19	0
“ liver,	0	1	Palsy,	4	0
“ lungs,	0	4	Perforation of intestines, .	0	1
“ spine,	0	1	Phthisis pulmonalis, .	44	16
“ stomach and bowels,	0	6	Pertussis,	0	13
Dropsy,	5	3	Poisoning,	0	1
“ abdominal,	1	0	Scirrhous of liver,	1	0
Drowned,	7	9	Scrofula,	0	3
Dysentery,	22	43	Small pox,	3	6
Effusion on brain,	1	9	Still born,	0	47
Enlargement of heart,	1	0	Spina bifida,	0	1
Epilepsy,	1	0	Spasm of intestines,	0	1
Erysipelas,	0	3	Suicide,	2	0
Exhaustion,	0	1	Sunstroke,	0	1
Fever,	2	2	Tabes mesenterica,	0	2
“ intermittent,	0	1	Teething,	0	2
“ puerperal,	2	0	Tetanus,	1	0
“ remittent,	3	2	Tuberculosis,	0	4
“ scarlet,	2	32	Tumor of larynx,	0	1

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Ulceration of throat .	0	1	Violence, . . .	1	0
" bowels, .	2	0	Wounds, . . .	0	1
Unknown, . . .	5	9		258	776

Of the foregoing the ages were as follows:—

Under	1	year,	-	-	-	470
From	1		to	-	2,	152
	2	-	-	-	5,	67
	5	-	-	-	10,	45
	10	-	-	-	15,	18
	15	-	-	-	20,	24
	20	-	-	-	30,	66
	30	-	-	-	40,	55
	40	-	-	-	50,	38
	50	-	-	-	60,	38
	60	-	-	-	70,	28
	70	-	-	-	80,	25
	80	-	-	-	90,	6
	90	-	-	-	100,	2
						1034

Included in this number, are 66 from the Almshouse, 16 from the surrounding country, and 18 people of color.

RECORD OF MEDICAL SCIENCE.

S U R G E R Y .

Self-inflicted wound of the throat, laying open the Oesophagus—Recovery. (Under the care of Mr. Adams.)—Wounds of the throat in persons who attempt to commit suicide, may be of a trifling kind, or cause death instantaneously, either by haemorrhage or suffocation. There are between these two extremes a great variety of lesions resulting from self-inflicted wounds of the throat, placing the patient in a more or less dangerous situation; among these, the complete division of the thyroid and cricoid cartilages, with a subsequent wound of the oesophagus, are looked upon as extremely hazardous, and the management of such cases requires great care and nicety. It is, however, satisfactory to notice, that an enlightened and close attention to the treatment may triumph over the numerous difficulties which lie in the way of recovery when the wound is of the above mentioned destructive descrip-

tion; and it is our pleasing duty to record a case, lately under the care of Mr. Adams, where favourable results were obtained.

From the notes of Mr. Ball, the house-surgeon, who very courteously afforded us frequent opportunities of seeing the patient, we are enabled to give the following details. On the 28th of February, 1850, a man, about twenty-five years of age, of thin, spare make, and a salesman by trade, was admitted into the hospital with an oblique incision in the anterior part of the throat, extending from above the thyroid cartilage to the fourth ring of the trachea. Both the thyroid and cricoid cartilages, and the three first rings of the trachea, were divided; the knife had passed between the sterno-hyoid and sterno-thyroid muscles, and had slightly lacerated them at their inner edges; the isthmus of the thyroid body was laid bare, but not divided. This desperate wound was inflicted by the patient's own hand while under considerable excitement, with a common table-knife, about an hour previous to admission. The haemorrhage had been considerable, but had ceased when the patient entered the hospital; the lungs, however, contained a large quantity of blood, which had passed into the trachea, and this fluid, excited by its presence in the lungs, constant cough, with expectoration of the blood through the wound in the throat.

This fact again proves how seldom the suicide succeeds in wounding the common carotid artery or jugular vein, the haemorrhage mostly proceeding from some of the primary branches of the external carotid. Here it would appear, that the violence used was expended upon the division of the hard bodies above mentioned, viz., the thyroid and cricoid cartilages, the rings of the trachea, and, as will be seen below, part of the oesophagus, these organs being probably rendered prominent by the head having been thrown backwards. The cut was likewise an oblique one, and was therefore less likely to reach to a greater distance posteriorly.

The patient, under these circumstances, was immediately put to bed, his head and shoulders were raised by means of pillows; a silver tube was passed into the trachea to facilitate the ejection of the blood; and lint, wet with cold water, applied to the wound. Mr. Adams saw the patient a few hours after admission, when the breathing was much easier, a large quantity of blood having been expectorated through the tube. Mr. Adams approved of what had been done, and ordered thirty drops of tincture of opium to be given to the patient without a vehicle, so as not to tax the powers of deglutition; but he swallowed this small quantity of fluid with great difficulty, and the attempt excited a violent fit of coughing. The patient made, towards the evening, several unsuccessful attempts to swallow small quantities of milk, but the greater portion of it passed into the trachea and caused violent cough; the milk, at the same time, escaping by the wound in the windpipe.

These phenomena confirmed Mr. Adams in the previous suspicion of wound of the oesophagus; the canula was therefore removed from the wound in the trachea, and an attempt made to pass a flexible tube into the stomach; this was, however, found impracticable, for the tube invariably passed through the wound in the trachea, instead of gliding down from the pharynx into the oesophagus, and excited an alarming amount of irritation. No doubt now remained regarding the wound

having reached the œsophagus ; and as no tube could be passed into the stomach, Mr. Adams had recourse to enemata for nourishing the patient. A pint of beef-tea was therefore injected ; the man was allowed to moisten his mouth with a wet rag, and as he breathed quite freely through the wound, it was not thought advisable to replace the canula into it.

This method of administering food by the rectum is invaluable in such cases, and the patient owes his life to this measure ; it is a pity that it is not invariably adopted in analogous circumstances. The case of a child, for instance, was lately mentioned at the Surgical Society of Paris, who had died of inanition. The little patient had had tracheotomy performed upon him to ward off impending suffocation from croup ; as the food subsequently passed through the opening in the trachea, the œsophageal tube was thought of, but could not be used, owing to the inflamed state of the larynx ; the child died. It is not too much to suppose that the child might perhaps have been saved by nourishing enemata.

The difficulty of deglutition in Mr. Adams's patient went on increasing on the second day ; even the swallowing of his saliva gave him great pain ; he was therefore ordered half a pint of beef-tea to be injected into the rectum three times daily. In the night the patient spoke once or twice in a whisper ; but strict silence was enjoined, as the effort of speaking excited fits of coughing, which left him greatly exhausted. The bowels having been relieved on the next day after admission, Mr. Adams ordered thirty drops of the tincture of opium to be administered in a starch enema of one ounce, towards the evening, to procure rest. The patient was likewise removed into a private room, as the cold air excited cough. This change to a higher temperature proved very beneficial ; the irritation about the air passages diminished considerably ; there was much less cough ; and a very evident improvement was noticed in the patient's countenance. He, however, was much tormented with thirst, to satisfy which, Mr. Adams ordered an enema composed of a pint of cold milk, and directed a small piece of ice to be placed in the patient's mouth. The wound, in the meantime, went on very favorably, and was dressed solely with lint dipped in cold water.

On the fifth day the patient was able to speak in a whisper without pain or exciting cough, and there was great improvement ; he was nourished entirely by beef-tea and milk enemata, with the administration of thirty drops of tincture of opium by the same means every night, the bowels being kept regular. On the eleventh day after admission, he began to take a small quantity of bread and milk by the mouth, which he succeeded in swallowing without any difficulty. The wound had in the meantime rapidly filled up, and was now about one-fourth of its original size. Beef-tea, milk, rice-pudding, and porter, were soon taken by the mouth, and the patient improved rapidly up to the twenty-third day after the rash act, when symptoms of constitutional disturbance appeared, and pain was complained of both in the head, neck, and shoulders. A purge of calomel and rhubarb, and a blister to the temples, did not succeed in removing these symptoms ; the tongue became tremulous and the pulse weak ; the patient was therefore prescribed bark with half a grain of hydrochlorate of morphia at night, and by the assistance of wine, porter, &c., he regained his strength ; the wound

healed completely, and the patient was discharged in a very satisfactory condition forty-one days after admission. He was still holding his head rather erect, however, and his voice was somewhat indistinct; but it is to be supposed that with the eventual perfect consolidation of parts within the trachea, and subsequent absorption of exuberant fibrinous deposits, the voice will regain its former tone. It will be noticed that no vessel required tying, and that no secondary haemorrhage took place; and as certain, not unimportant, branches of the external carotid *must* have been divided, the fact of the cessation of the bleeding will be an additional illustration of the retracting power of arteries, when completely divided. Nor should it be passed unnoticed how well was exemplified in the foregoing case the propriety of avoiding plaster and sutures, as is generally advised by systematic writers when treating of wounds of the thorax.—*Lancet.*

Strabismus.—Division of the Rectus by means of Lane's Knife made by Savigny.—Every improvement in surgery is interesting, and we eagerly seized the opportunity afforded us by the kindness of Mr. Gay of seeing this instrument used. It is a small curved bistoury, with a partially blunt point. The patient was a little girl. Placed under the influence of chloroform, Mr. Gay, having fixed the eye, introduced the knife by the under side of the rectus, and, holding it flat, passed it vertically on. Owing to its peculiar construction, it went close under the tendon, the point becoming prominent on the other side. On this the operator placed his finger, turning the knife up, when it cut its way out. A second touch of the knife was required, whereupon the globe of the eye instantly resumed its normal position. As nothing can be more simple than this instrument, we sincerely wish to see it tried still further. Its advantages, we are given to understand, are, that from its construction, its point will pass through all the textures external to the sclerotic, but that no force can make it penetrate this membrane.—*London Med. Times.*

OBSTETRICS.

Cases of Pregnancy, notwithstanding previous severe injury to the organs concerned in Childbirth. By DR. LEOPOLD, of Meeran, Schonburgh.—*Case 1.*—Mrs. —— was delivered with instruments, on the 1st of January, 1843, by an experienced accoucheur, and suffered considerably from ischuria on the following day. On the 6th, Dr. Leopold saw her in consultation. A large hard tumor, tender to the touch, filled the greater part of the vagina. The nature of this tumor was doubtful, and continued so until the 9th inst., when, having taken a strong purgative, she felt during its action a substance pass from the vagina. Copious haemorrhage occurred, followed by syncope. On examination the prolapsed and inverted uterus was found between her thighs, lying in a pool of blood, urine and faeces. It was immediately washed and returned. The haemorrhage ceased; the fundus uteri could

be felt beneath the abdominal parietes. The patient was confined to the recumbent posture for many weeks. She perfectly recovered her health, and was delivered of another child two years afterwards without instrumental aid. In this case it is possible that partial inversion of the uterus may have been occasioned at the time of delivery by adhesion of the placenta, and that the subsequent accident converted this into complete inversion and prolapsus.

Case 2.—Mrs. —, the mother of five children, was in labor on March 30th, 1844. The arm presented, and it was necessary to turn. During the operation the patient exclaimed that she was suffering excruciating pain in the left side of the pelvis. She threw herself about in the most inconvenient positions just as Dr. Leopold had reached the foot. Much care was required to complete the delivery, as the pains also flagged. The placenta was expelled without haemorrhage. At midnight of the same day Dr. Leopold was summoned to her, and found her lying with all the symptoms of severe haemorrhage, but only a few ounces of blood were found in the bed. On passing the hand into the vagina several large coagula were expelled. The uterus was found lying over to the right side of the pelvis. The os uteri was open, and the uterus contained some coagula, which were quickly expelled by the contractions of the organ from external and internal stimulation. On the left side of the vagina, the hand entered a large sac full of blood. The orifice of this sac was about an inch from the os uteri, and was sufficiently large to admit the hand without force. Its walls were formed by the iliac bone, by the abdominal parietes, as high as the crista ilii, and by the iliocostalis internus muscle. A large quantity of coagulated blood was removed, and further haemorrhage restrained by continued external application of cold. The patient refused all internal remedies. The prognosis was unfavorable. The extent of the injury indicated a remote origin; and, on inquiry, it was learnt that the patient had suffered from pain in the left side and hip during the whole period of her pregnancy, but had been compelled to follow her work at the loom.

The pains during labor were frequent and violent. A short time before the rupture of the membranes she had experienced a sensation as of a sudden and painful giving way of the parts on the left side. She had suffered from peritonitis after her previous confinement. A chronic abscess had no doubt existed in this spot, and was ruptured during labor by the force of the pains and the cross position of the child. The patient had again on this occasion an attack of puerperal fever, from which she recovered in three weeks. A purulent discharge continued for upwards of three months, after which she perfectly regained her health and strength, with the exception of diminished power in the left hip joint. Two years afterwards she was again confined, without any unfavorable occurrence.—*Lond. Med. Gaz.*

PATHOLOGY AND PRACTICE OF MEDICINE.

KING'S COLLEGE HOSPITAL.

Continued Success of the Kousso in promoting the Expulsion of the Tape-worm.—In former numbers of the *Lanceet*, (March 16, 1850, and April 20, 1850,) cases were noticed in which the Kousso was found very efficacious for procuring the expulsion of the *tænia solium*. This plant is now acknowledged to be so useful in tape-worm, that it seems almost unnecessary to adduce new cases; we shall, however, just sketch a few of those which were lately benefited by the Kousso, as they present various features of interest.

The first case, as taken from Mr. Jordan's notes, runs as follows:—Rebecca R., aged 22, is a native of Wapping; she went to Devonport when seven years of age, but only stayed there about a fortnight; with this exception she has constantly lived in town, generally at Wapping, but about eighteen months ago she spent a year at Peckham. Patient's sister, who has been dead nine years, also suffered from tape-worm, which remained upon her to the time of her death. Patient likewise knows of a neighbor of hers in Wapping, close to her own home, who suffers from the *tænia*. This latter person and the above-mentioned sister are the only people she knows to be thus affected. The water is supplied by the New River Company to the whole neighborhood.

Patient was quite healthy until about two years ago, since which time she has had great pain in the side and stomach; her appetite was good, but she used to feel sick on first getting up; she had, however, no idea that she harbored a tape-worm until a week before Christmas, when she first passed joints of it, and from that period, such joints have been passed almost every day.

Twice since she first noticed the joints she has passed long pieces of the worm, once after opening medicine, the other time without any such agency. She has never taken any turpentine nor any other remedy expressly for the worm.

Patient was admitted under the care of Dr. Budd, and took the Kousso at half-past nine in the morning, the day after her admission; and, after taking a dose of castor oil in the middle of the day, the worm was passed with a motion at a quarter to five in the afternoon. This entozoon was nearly three yards in length, and the narrow segments approaching to the head were attached to it, though not the head itself. The medicine gave patient a slight feeling of sickness, which soon went off again. Her appetite was bad on the day she took the Kousso, and she felt weak. With the exception of the tape-worm patient seems to have generally had good health; she has only a slight cough. Her mother and sister died of phthisis, but patient's appearance is remarkably florid and healthy. The day after admission, this woman left the hospital in good condition, without passing any more of the worm.

The second case was admitted under the care of Dr. Todd. The subject is a young woman, native of Scotland, *four months advanced in*

pregnancy. She complained to Mr. Steele, the house-physician, that she was in the habit of passing long *round* worms, but when she brought the joint, which she had lately evacuated, they were found to be pieces of the *tænia solium*. When the nature of the worm was ascertained, the patient was admitted into the house, and took the *Kousso* in the morning; at seven in the evening she went home, and a quarter of an hour after she had reached her residence, she passed five yards of the worm.

The third case was sent to Dr. Todd from the country. The patient is a middle-aged woman, residing at Bow, who took the *Kousso* at three o'clock in the afternoon, and left the house immediately afterwards, promising to bring the worm as soon as she should evacuate it. The next morning she brought a tape-worm measuring about six yards in length.

The fourth case, who was admitted under the care of Dr. Budd, is that of a man, about 46. His health has, in general, been pretty good; last winter, however, he was attacked by cholera, and treated in King's College Hospital. Whilst laboring under this disease, patient did not pass any joints of the tape-worm, though previous to his being visited by the epidemic he had now and then evacuated portions of the *tænia*. When convalescent, he took some oil of turpentine, and by the agency of this medicine he voided a few joints. From that period he continued passing joints, and was admitted under the care of Dr. Budd, May 3, 1850. Patient took the *Kousso* in the morning, and had two doses of house medicine in the course of the day. At six o'clock in the evening, he passed a tape-worm of a very great length, since it measured nearly ten yards. The next day he voided a piece, six inches long, which came evidently from very near the head. It is to be regretted, as we stated before, that this medicine is so expensive; still, when it is considered how rapidly and effectually it promotes the evacuation of the *tænia*, the 17s. 6d. can hardly be looked upon as a high price; the more so, as in hospital practice, the patients need stay in the house but a short time. It will be extremely interesting to keep an eye upon these patients, in order to ascertain whether the benefit is of a lasting or temporary kind.—*Lancet.*

Case of "White Blood."—Dr. Bennett mentioned, that there was at present, in the male clinical ward, a boy affected with extreme enlargement of the spleen. On examining a little of his blood microscopically, a very large amount of corpuscles was discovered, quite undistinguishable from pus corpuscles. There were many features of interest in this case; it was the second of the kind which had fallen under Dr. B.'s observation, and he proposed, at some future period, to lay before the profession the conclusions to which it led. Meanwhile, any member of the society had an opportunity of examining the case in the infirmary.—*Ibid.*

CHEMISTRY.

On the changes which Ether, Alcohol, and bodies of a similar constitution, suffer when taken into the Circulation. By CHARLES W. WRIGHT, M. D., of Cincinnati.—The rapidity with which certain substances manifest their action when taken into the circulation, has often engaged the attention of medical men, and more especially so since the discovery of the remarkable anæsthetic properties of the ethers, naphtha, and chloroform.

It is observed that when a medicinal substance is inhaled, much less is required to produce its characteristic effects than when it is administered by the mouth; and it is often stated that therapeutic agents operate quite differently when taken into the stomach, from what they do when inspired. This difference seems to be more apparent than real, as I think a thorough examination into this subject would plainly show; and if there be a difference, it is more in degree and rapidity than in kind.

Ether and alcohol are the first that will be considered under this head.

The first effect of the inhalation of the vapor of ether is to stimulate the system powerfully, but this state of excitement soon passes off, and is rapidly succeeded by a lethargic condition of the system, the skin becoming cold and pale, lips of a livid hue, slow and laborious respiration, in fact coma supervenes, and this in from two to five minutes. Introduce the same substance, but in larger quantity, in the liquid form, into the stomach, and what then occurs? why the same train of symptoms precisely, but which are much slower in making their appearance, and which are protracted a greater length of time. That it should require a larger quantity of ether to produce these effects through the medium of the stomach than the air passages, is obvious, for when ether, in the form of vapor, is inhaled, being exposed to a great extent of absorbing surface, it passes at once into the circulation, and there meeting with oxygen in a very active form, enters into combination with it, forming carbonic acid and water, being attended at first with excitement which retards the supervention of coma. The combustion of the ether is very rapid at first, but as the oxygen is consumed it fails to perform its task of purifying the blood, the consequence of which is, carbonic acid accumulates in that fluid, and death is finally brought about in precisely the same manner as if the patient had in the first instance inhaled carbonic acid gas. The impression which I wish to convey may be illustrated by comparing the inhalation of ether to the common experiment of plunging a lighted taper into a vessel of oxygen gas. In that case the combustion begins with great energy, but the flame grows less and less, until it is finally extinguished. Now there are two causes in operation tending to retard and ultimately arrest the combustion in this experiment; the first is the gradual disappearance of the oxygen from the vessel in which it is contained, the second is the influence which carbonic acid exerts in diminishing the combustion going on in flame.

The excitation of ether, when first administered, is very rapid; but as carbonic acid is generated in proportion as it is consumed, and the blood in other respects fails to be decarbonized, the excitement is soon succeeded by lethargy, the person dying as if poisoned by carbonic acid; the symptoms and post-mortem appearances being the same in both cases. In the former, the poison is formed by combustion going on in the system, but in the latter it is formed out of the system and inhaled.

The arrest of the circulation is not unlike that which results from the respiration of nitrous oxide gas, but from a different cause. When the exhilarating gas is inhaled a considerable length of time, the pulmonary capillaries no longer have an attraction for venous blood, it being saturated with oxygen. Carbonic acid produces just the opposite state, by charging the blood throughout the body with carbonic acid, and destroying the attraction which the systemic capillaries have for the blood in the arteries. Great irritability is induced by the former substance, and the heart continues to pulsate even after the circulation in other respects has ceased.

When taken into the stomach ether produces the same set of symptoms, with this difference, that the stage of excitement lasts longer, and if the quantity taken be not too large, gives the system time to throw it off in the form of water and carbonic acid. Even here, however, if an overdose be swallowed it may prove fatal, the symptoms being the same as when it is respired.

The symptoms occasioned by the introduction of alcohol into the circulation, are much the same as those produced by ether. This will appear evident when we look at the composition of these two bodies. Alcohol is represented by the formula $C_2H_5 + O_2$. Ether has the same constitution, $C_2H_5 + O$, minus one atom of water, H_2O .

When consumed, they both yield the same products. That of ether $12O + C_2H_5O_4 = 2CO_2 + 5H_2O$. That of alcohol $12O + C_2H_5O + H_2O = 4CO_2 + 6H_2O$.

Naphtha has been used as an anæsthetic agent, and it probably operates on the same principle, but from its producing a very rapid and fluttering pulse, its employment is not considered safe.

Carbonic oxide produces a pleasing delirium before it narcotizes, if gradually introduced into the lungs; but cases of poisoning with this gas are exceedingly rare.

That there are other influences operating here, I do not pretend to deny, but that the characteristic effects of these agents are produced in the manner set forth, I think a thorough examination of this subject in all its bearings would not fail to show.—*Western Lancet.*

MATERIA MEDICA AND THERAPEUTICS.

Method of depriving Quinine of its Bitterness.—Believing that I have discovered a method by which quinine may be quite deprived of its great bitterness, without injuring its virtues in the least, I wish to make it known to the profession. Perhaps I have been anticipated, but if it be so I am not aware of it.

In August last, having occasion to prescribe for a little patient, who was affected both with diarrhoea and intermittent fever, I ordered a combination of quinine and tannic acid. The child took it so readily that I tasted it, and was surprised to discover no taste of quinine, which I at once attributed to the combination.

I have since prescribed it in a number of instances, and found that whilst it was equally effectual, it was far more palatable than any other combination of quinine I was acquainted with. On referring to the American Journal of Medical Sciences, Vol. xix., page 219, (1836,) it will be found that Dr. Ronander, Secretary of the Swedish Medical Association, recommended the tannate of quinine and cinchonin as the most active ingredients of the Peruvian bark. He asserts that he has cured, by their means, several cases of obstinate ague, which had resisted the use of sulphate of quinine, and other powerful remedies. Nothing is said in the extract from the original paper in Hecker's Annals, December, 1834, of the taste of the tannate of quinine. Compared with the sulphate, it is almost tasteless.

The following is the extemporaneous prescription I am in the habit of ordering for a child two years old —

R. Quiniæ sulph. gr. x.;
Acid. tannici gr. ij.;
Aquæ, 3vj.;
Syrup aurant. 3ij. M.
A teaspoonful every hour or two.

I enclose a note on the subject from one of our most intelligent and careful apothecaries :—

Dear Sir,—I find, after trying a number of times, combinations of quiniæ sulphas and acidi tannici, in different proportions, that ten grains may be deprived of its bitterness in a great degree by the addition of one grain and a half of tannic acid. I think this is a proper proportion.

J. V. D. STEWART.

Dr. Thomas of Baltimore in American Journal of Medical Science.